

FIG. 1

FIG. 2

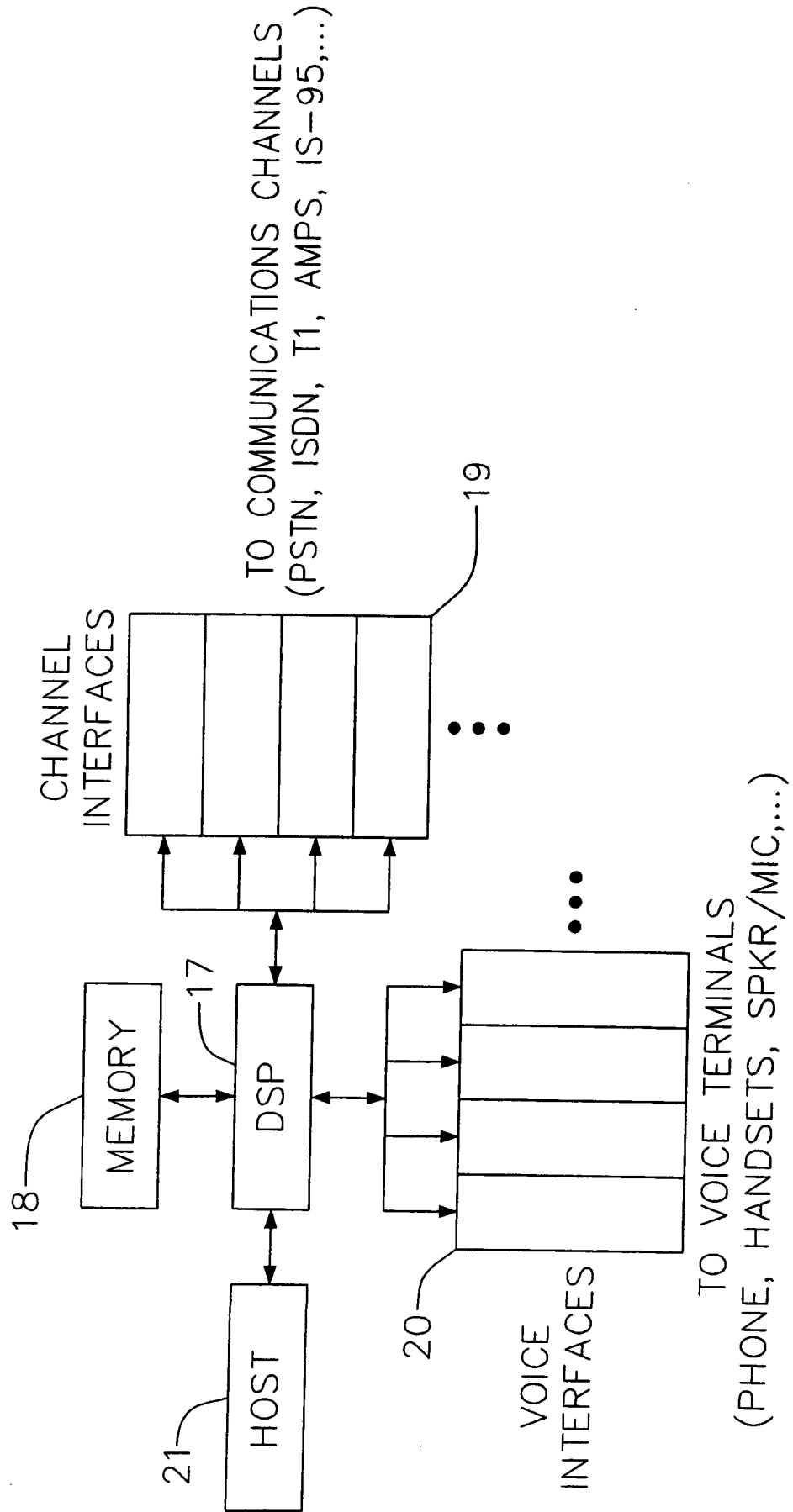


FIG. 3

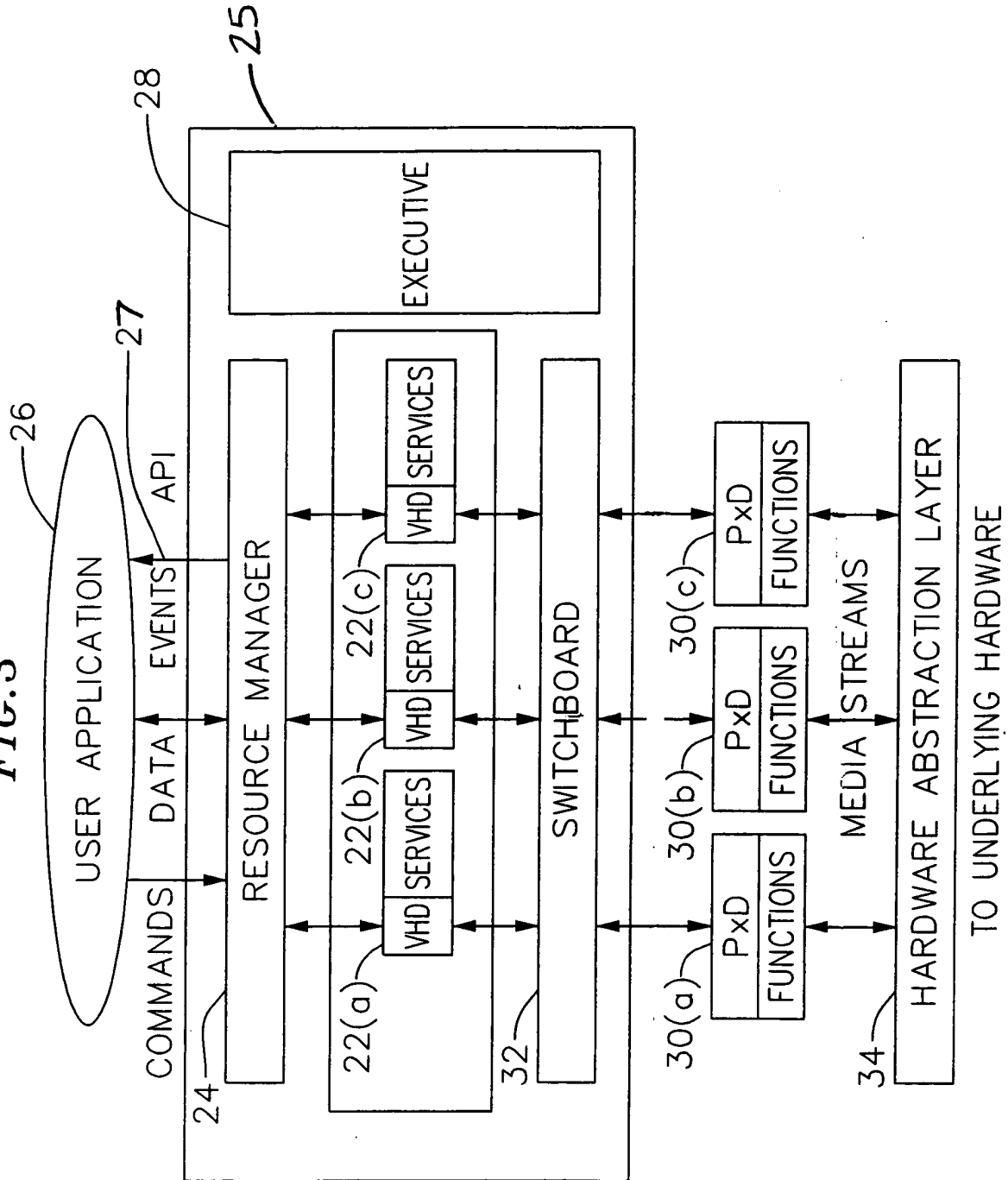


FIG. 4

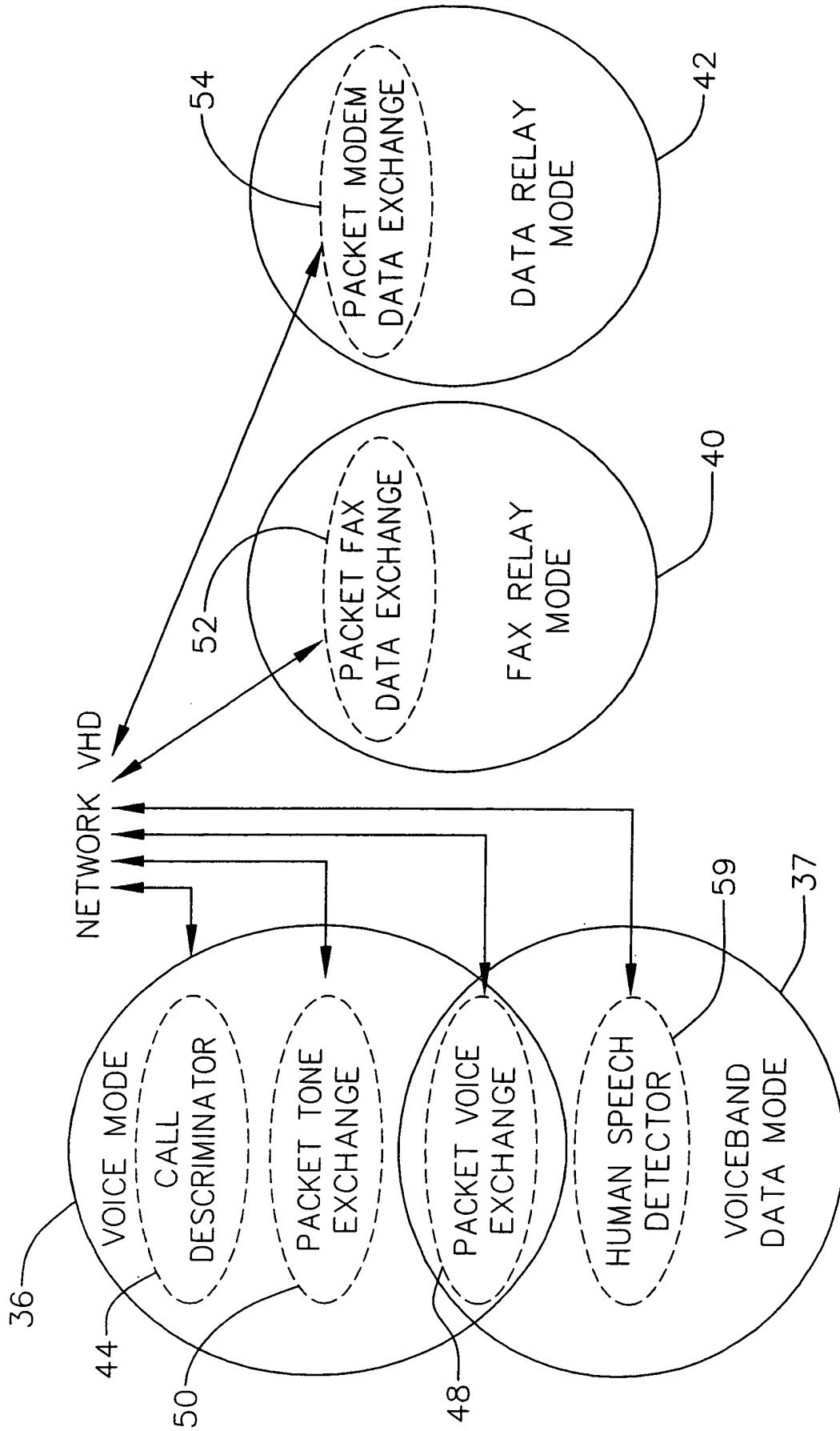
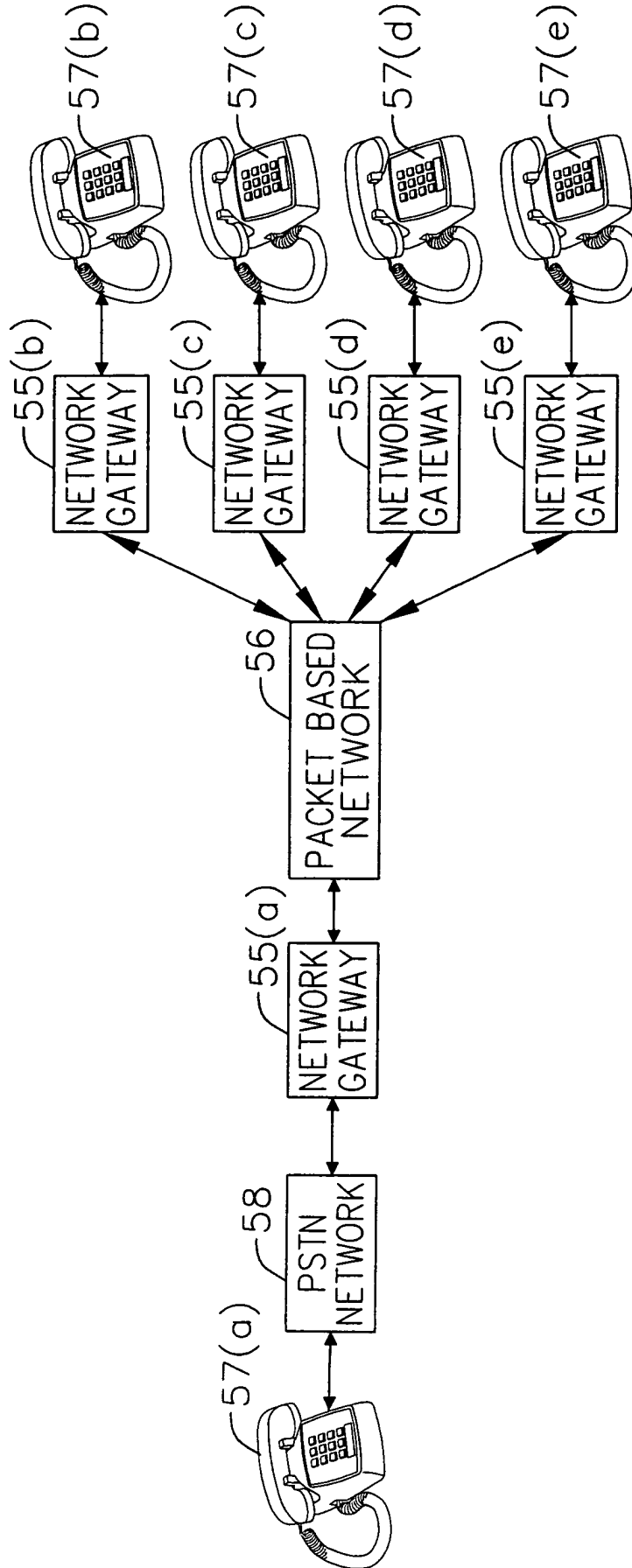
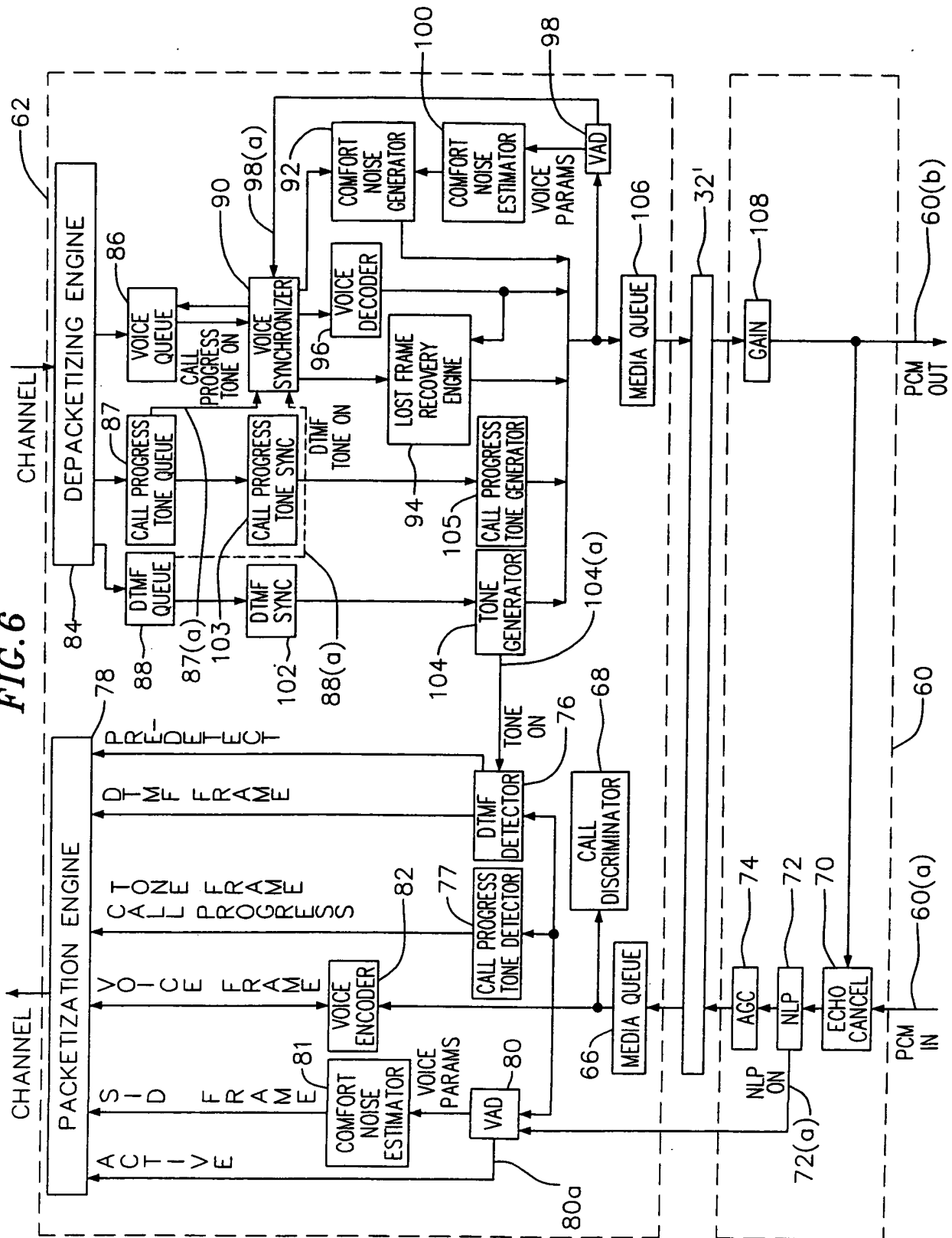
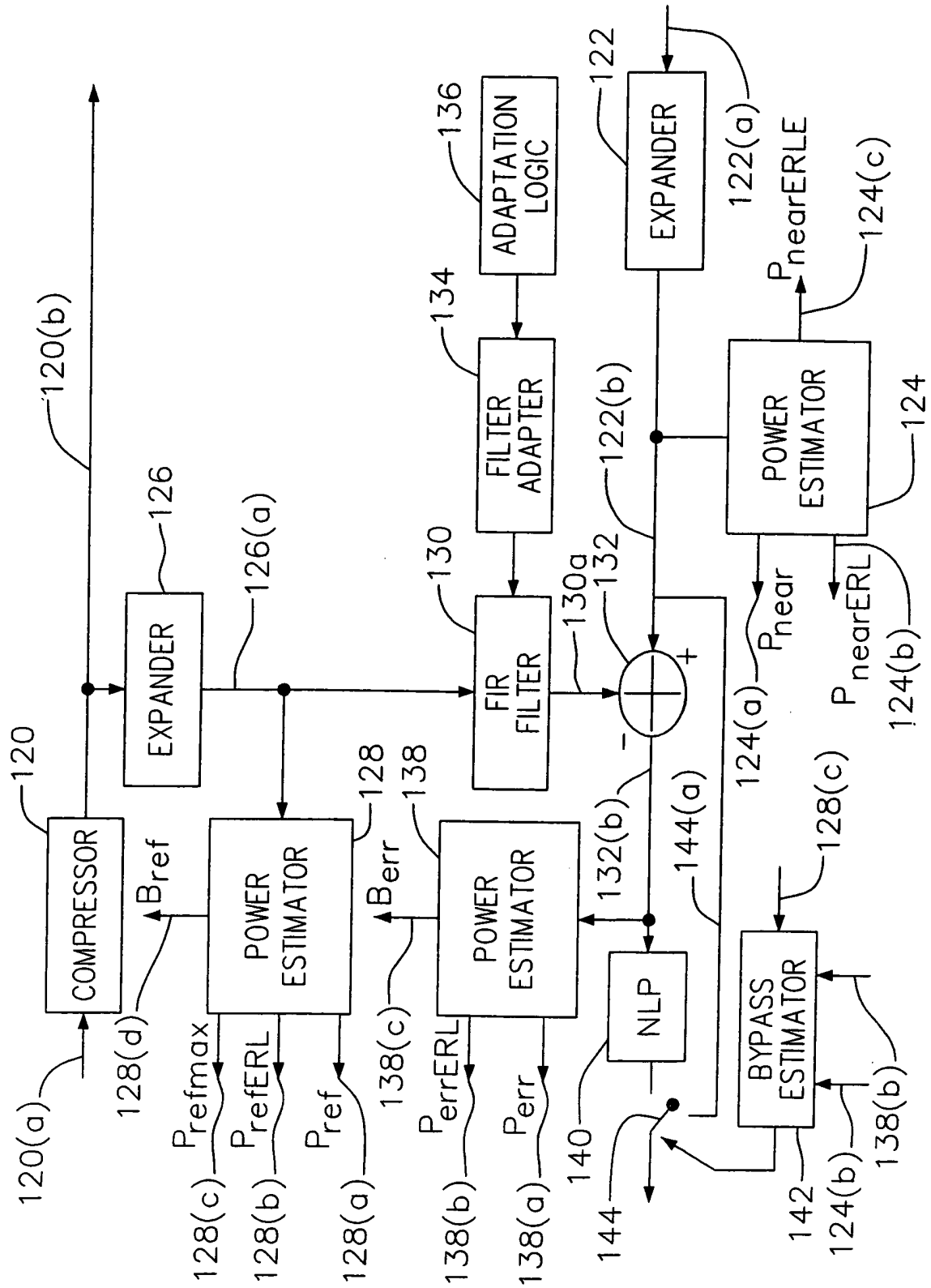


FIG. 5



**FIG. 6**





**FIG. 7**

FIG. 8A

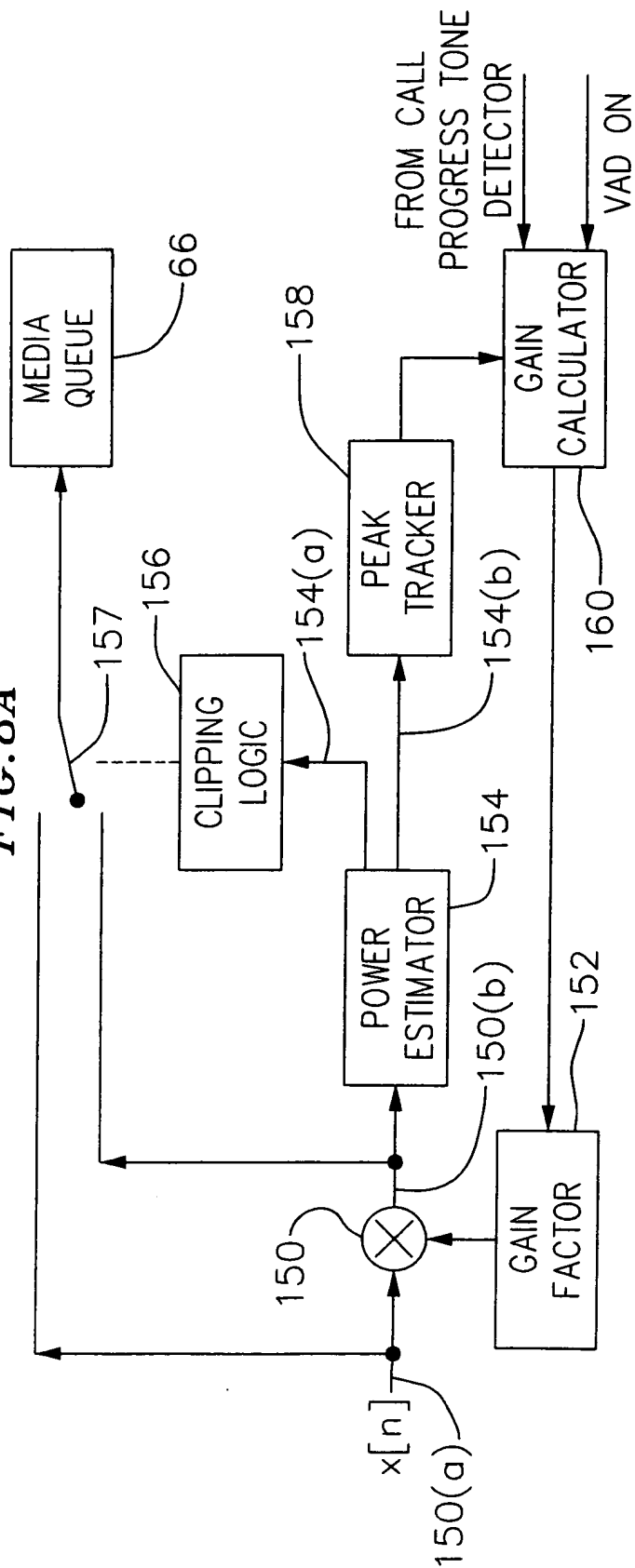


FIG. 8B

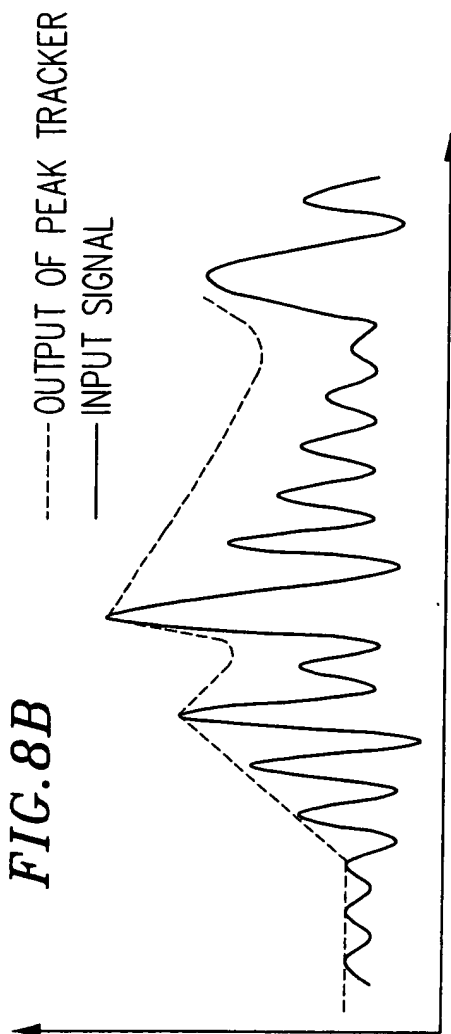
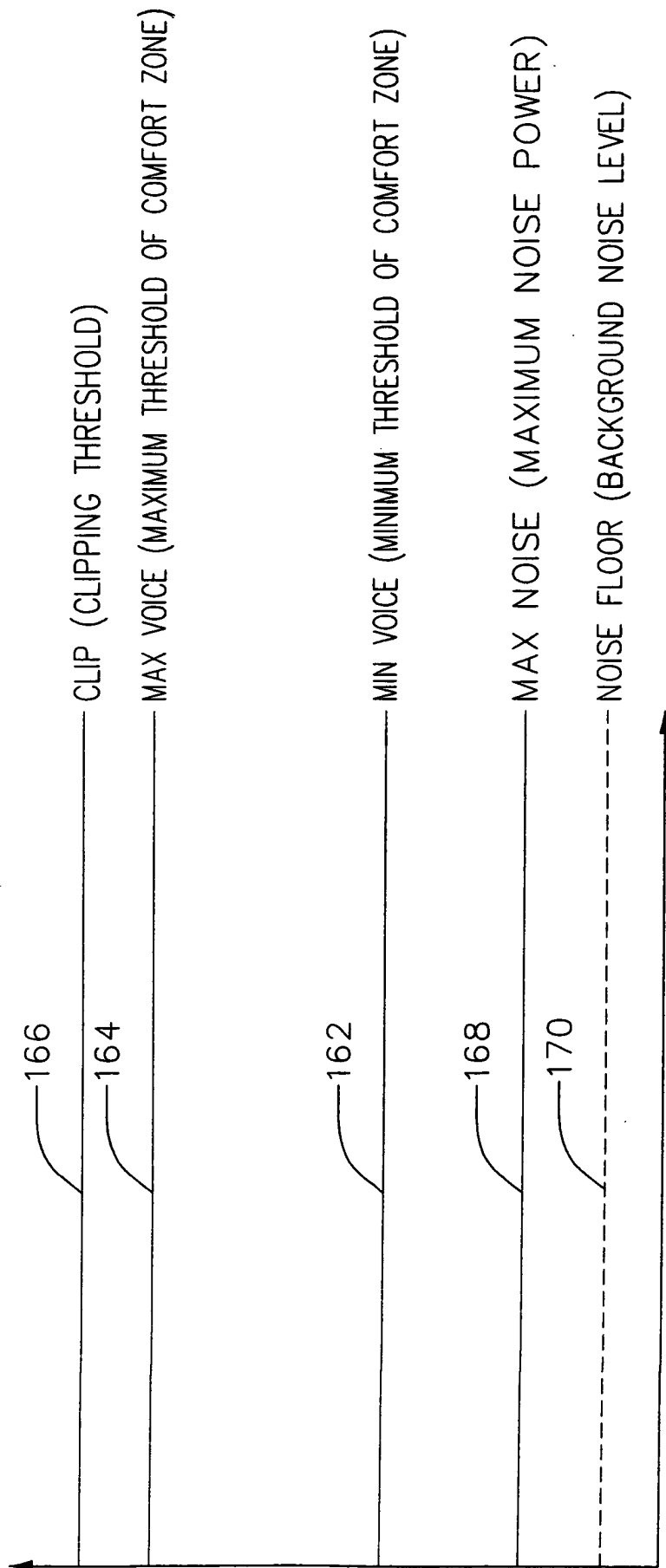




FIG. 9



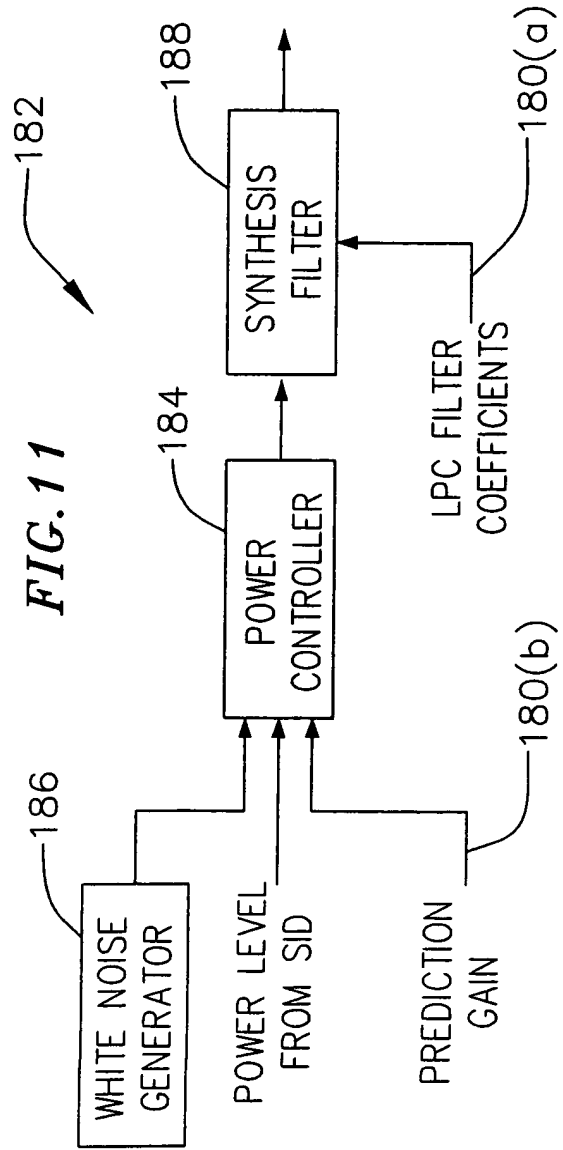
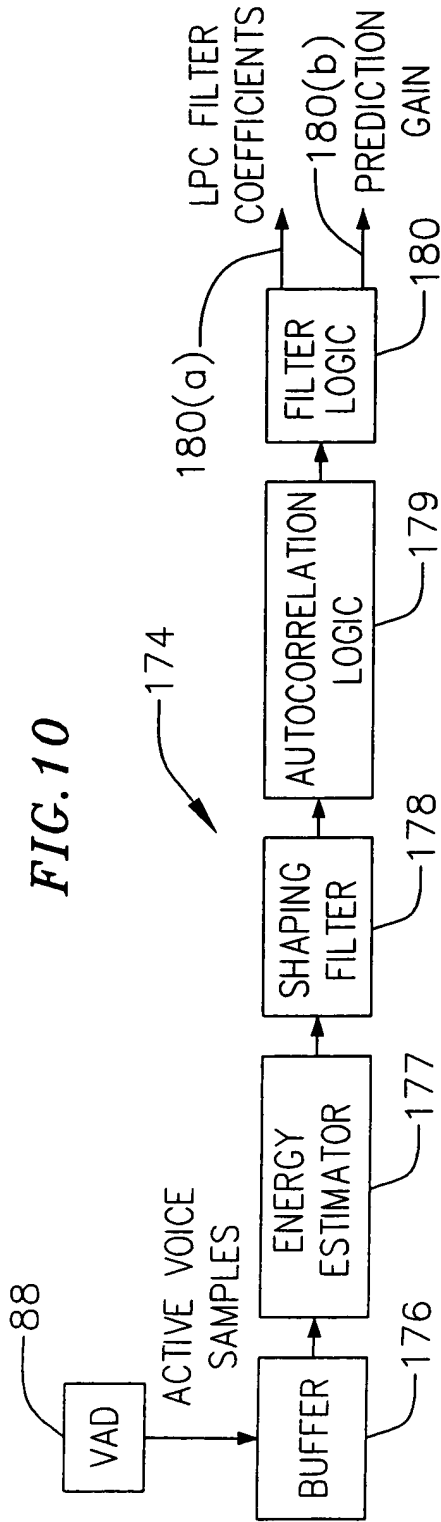
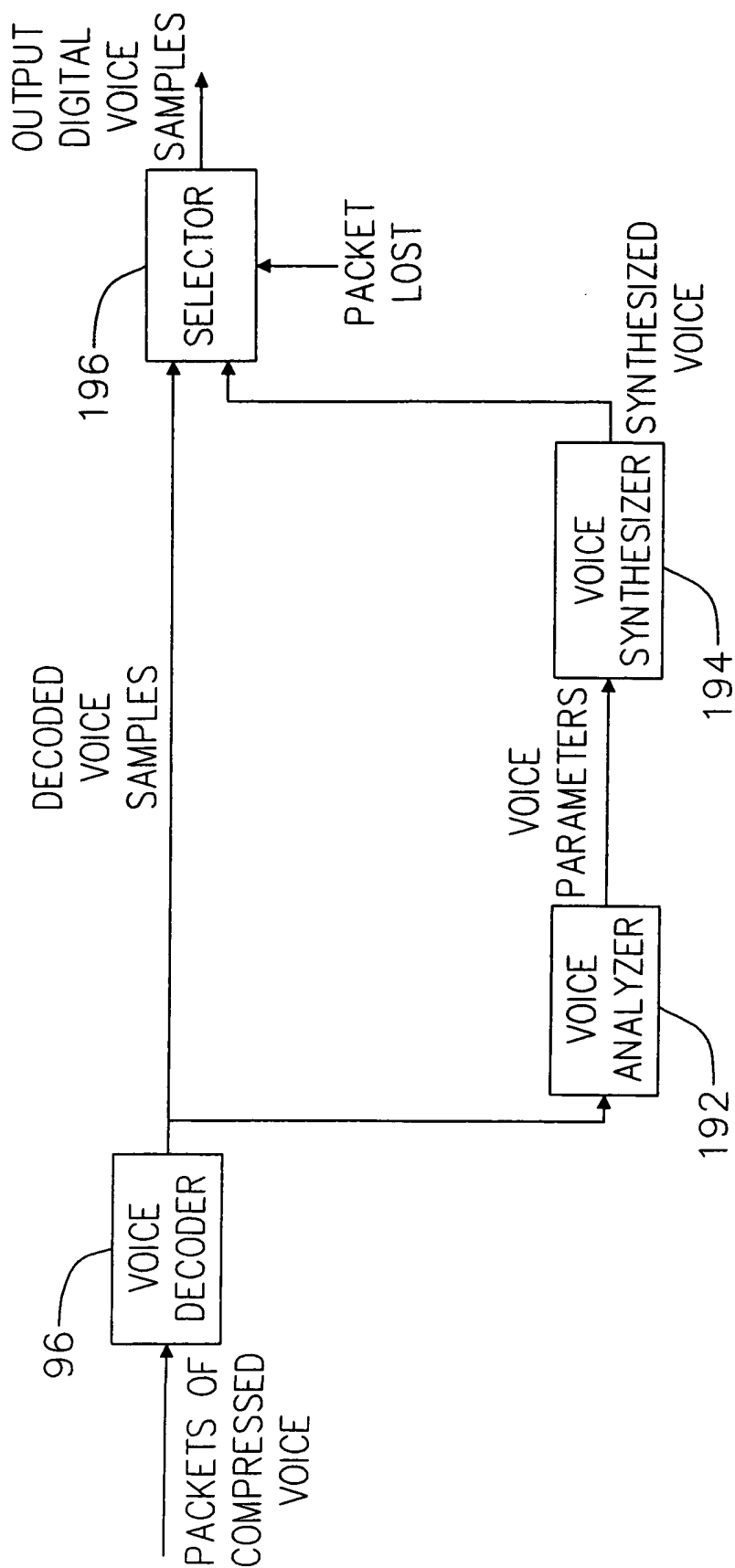
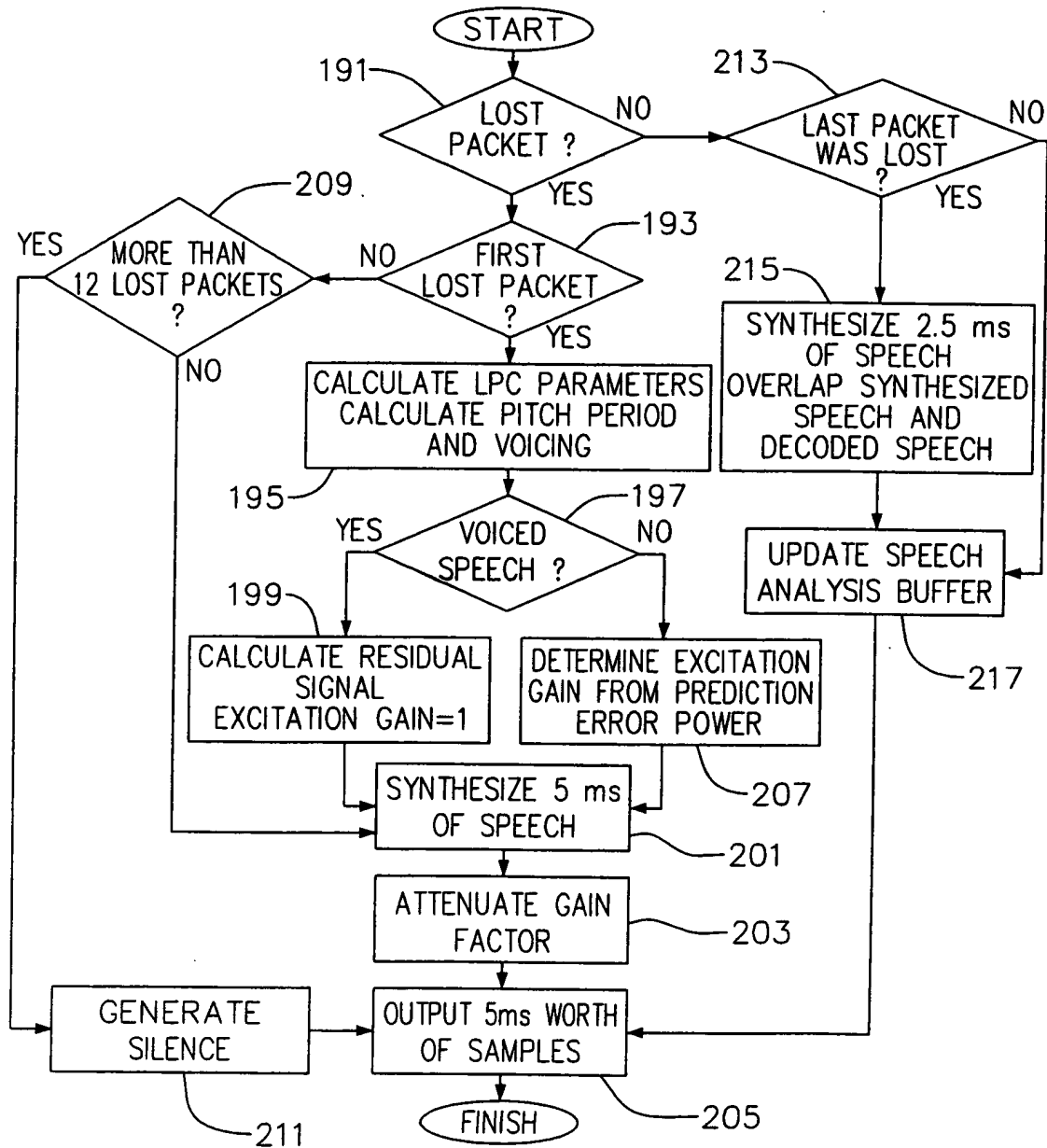


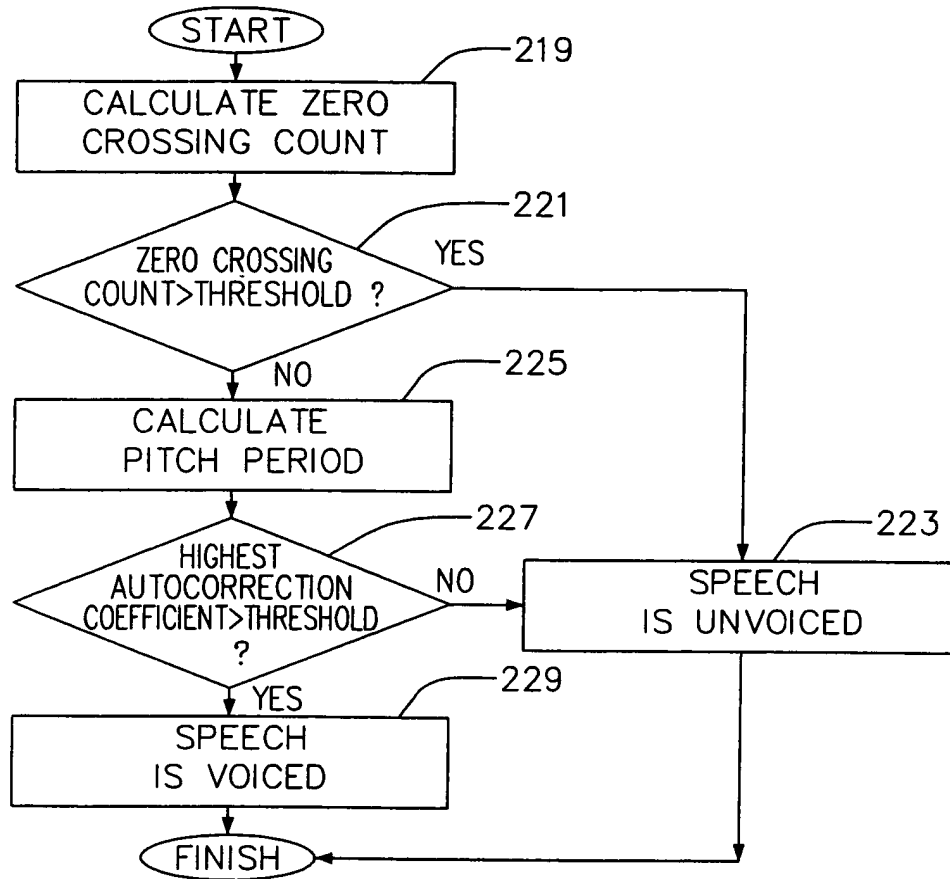
FIG. 12



**FIG. 13A**



**FIG. 13B**



**FIG. 13C**

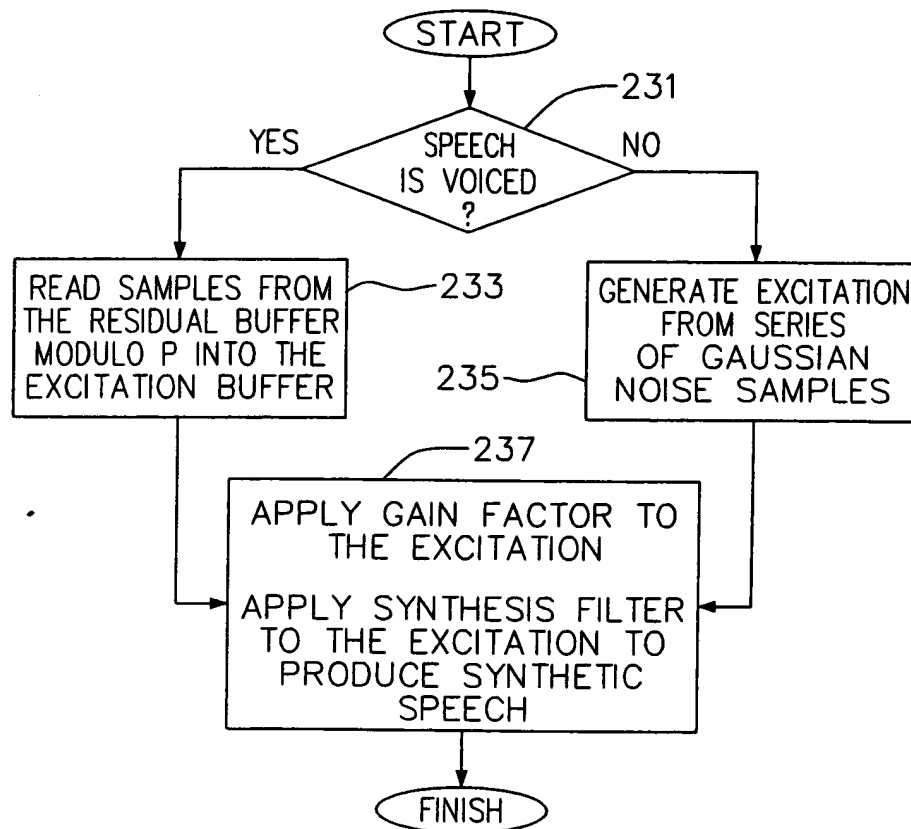
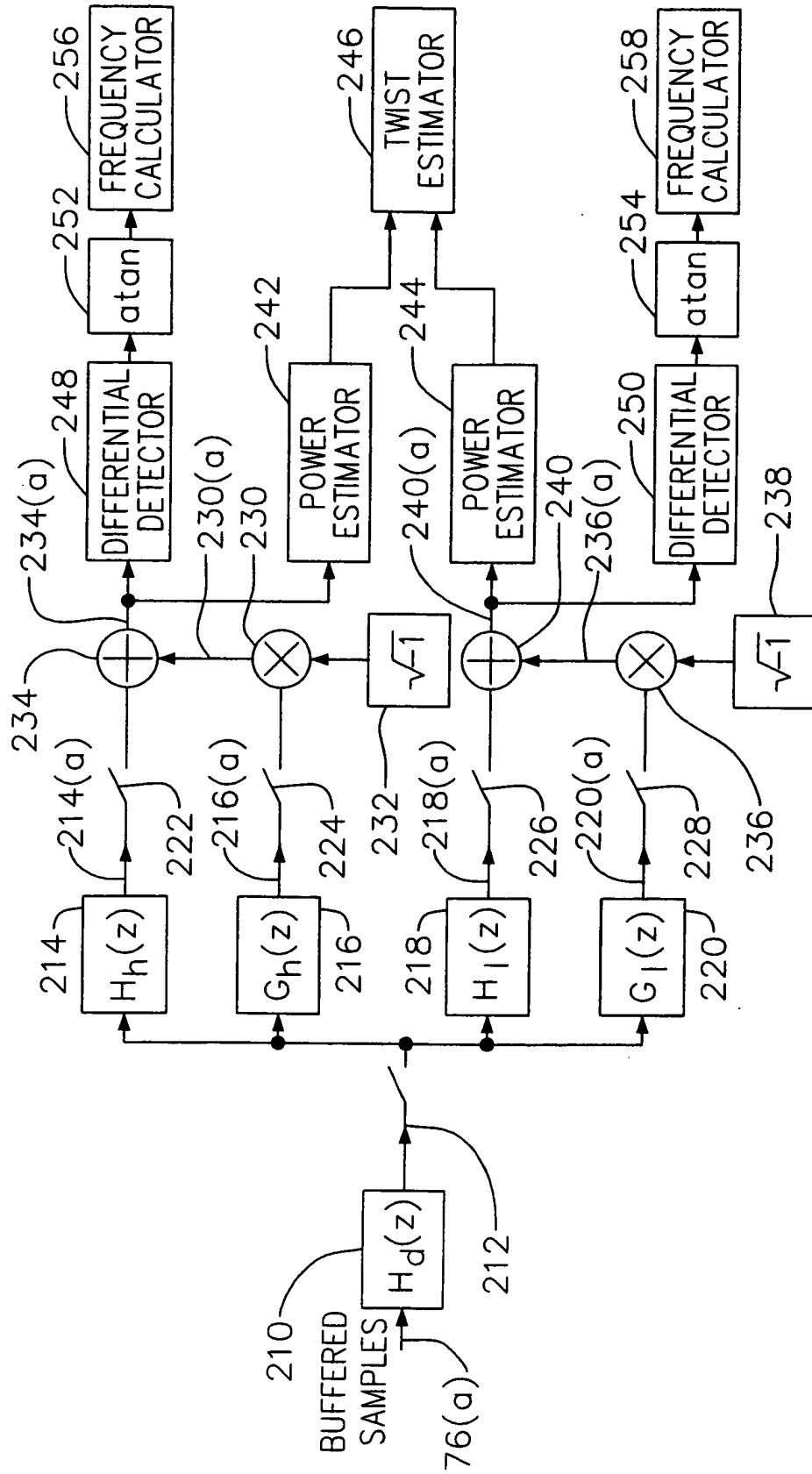


FIG. 14



*FIG. 14A*

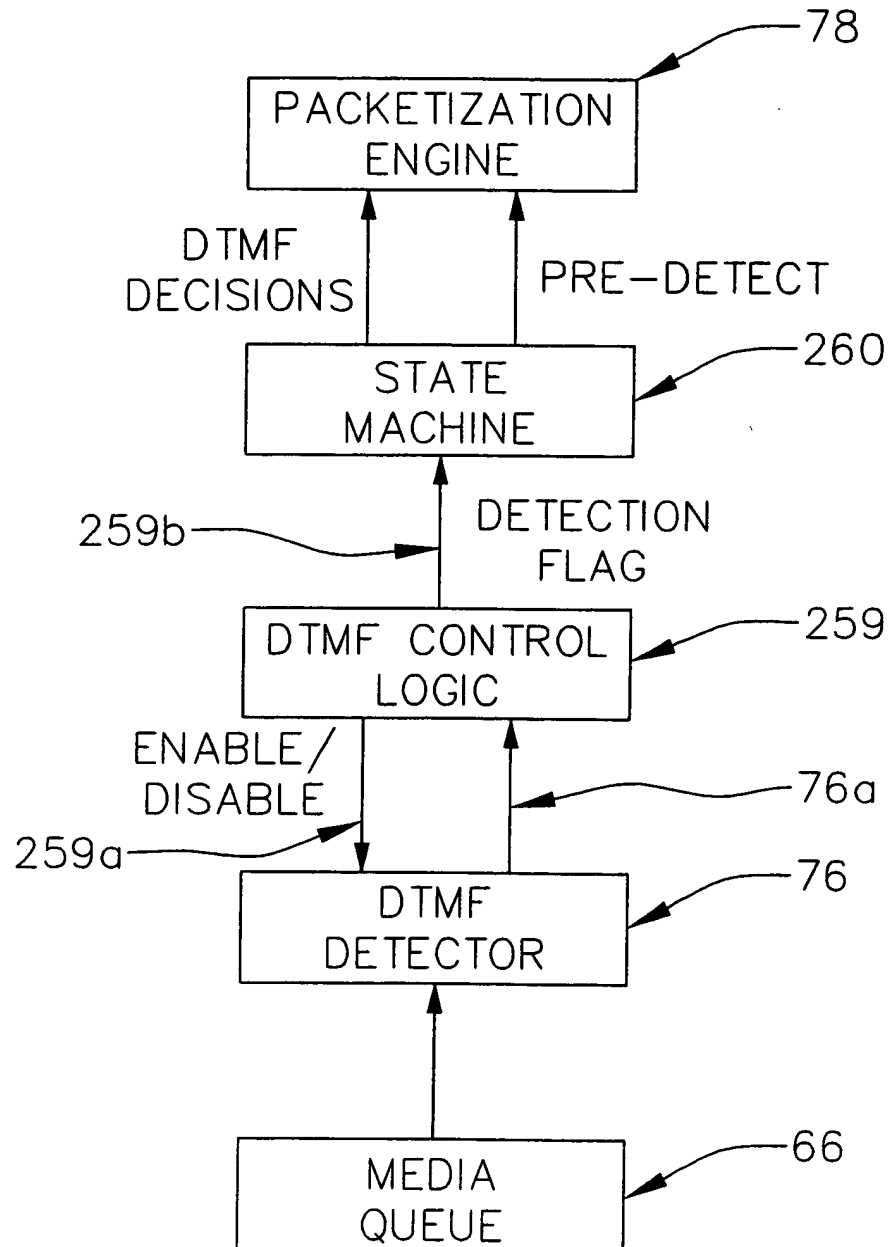
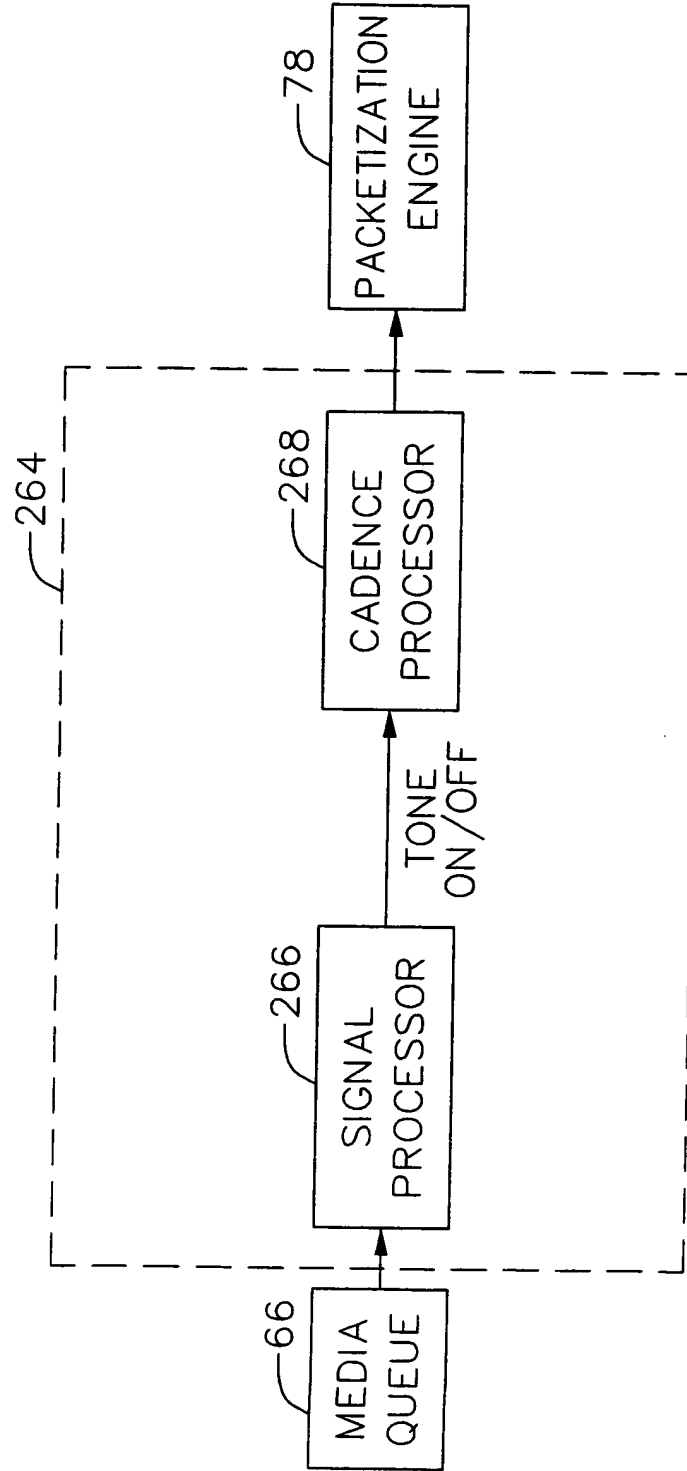
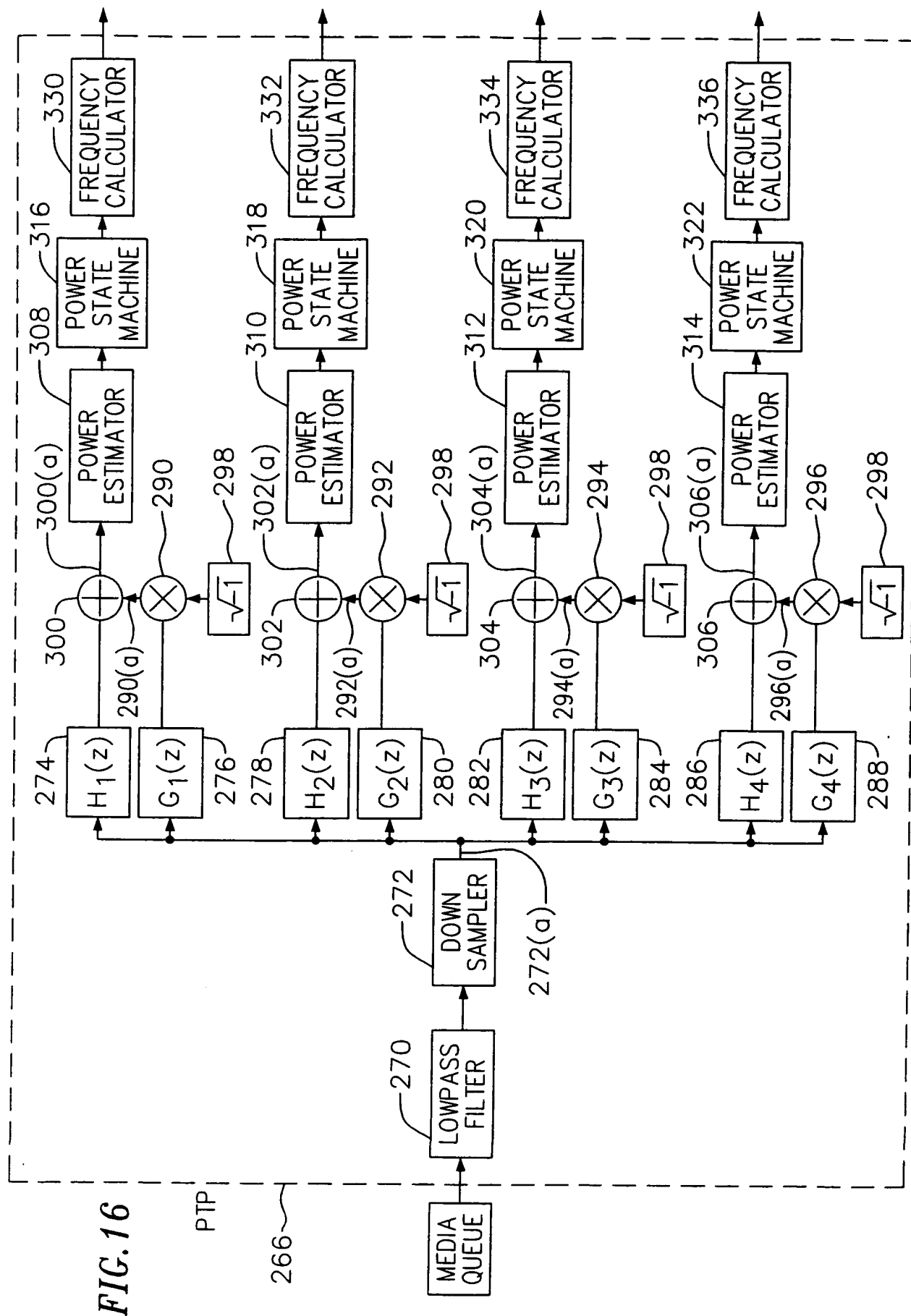


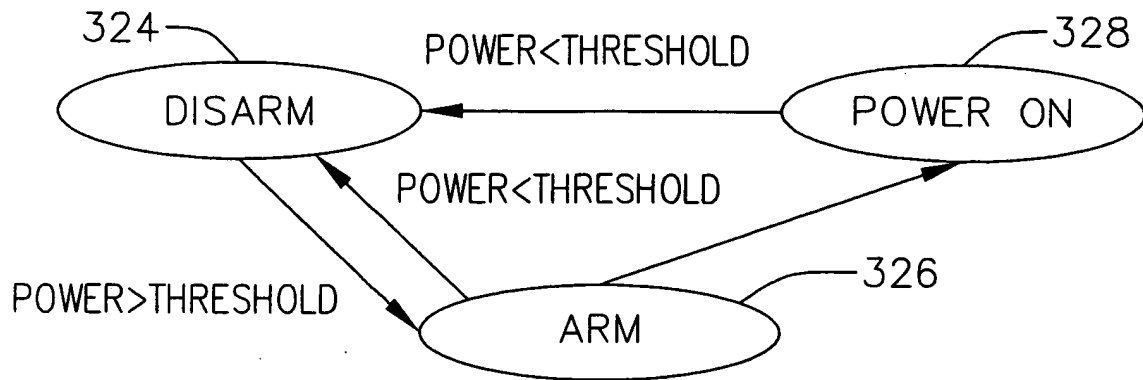


FIG. 15





**FIG. 17**



**FIG. 18**

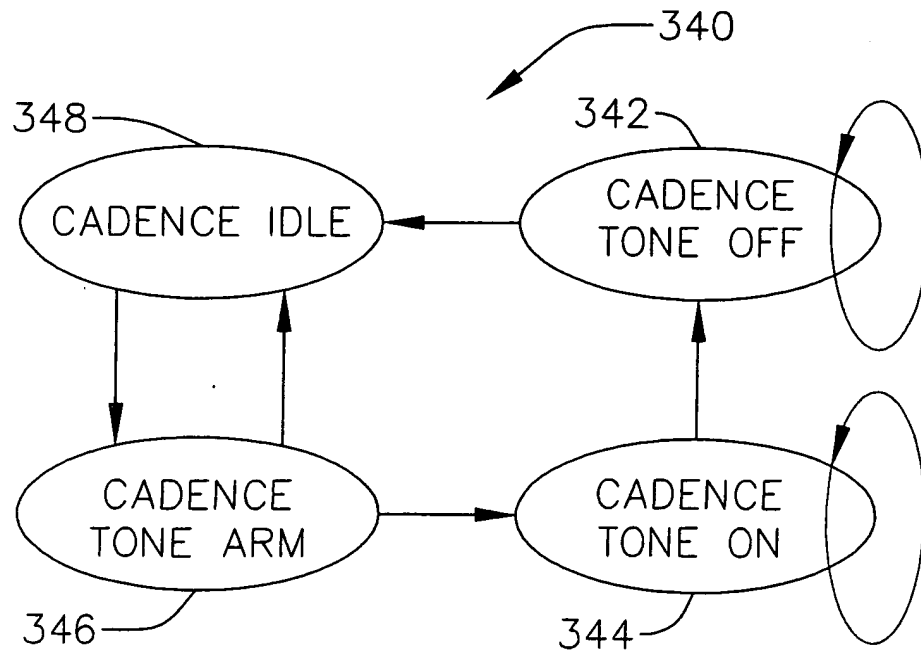


FIG. 18A

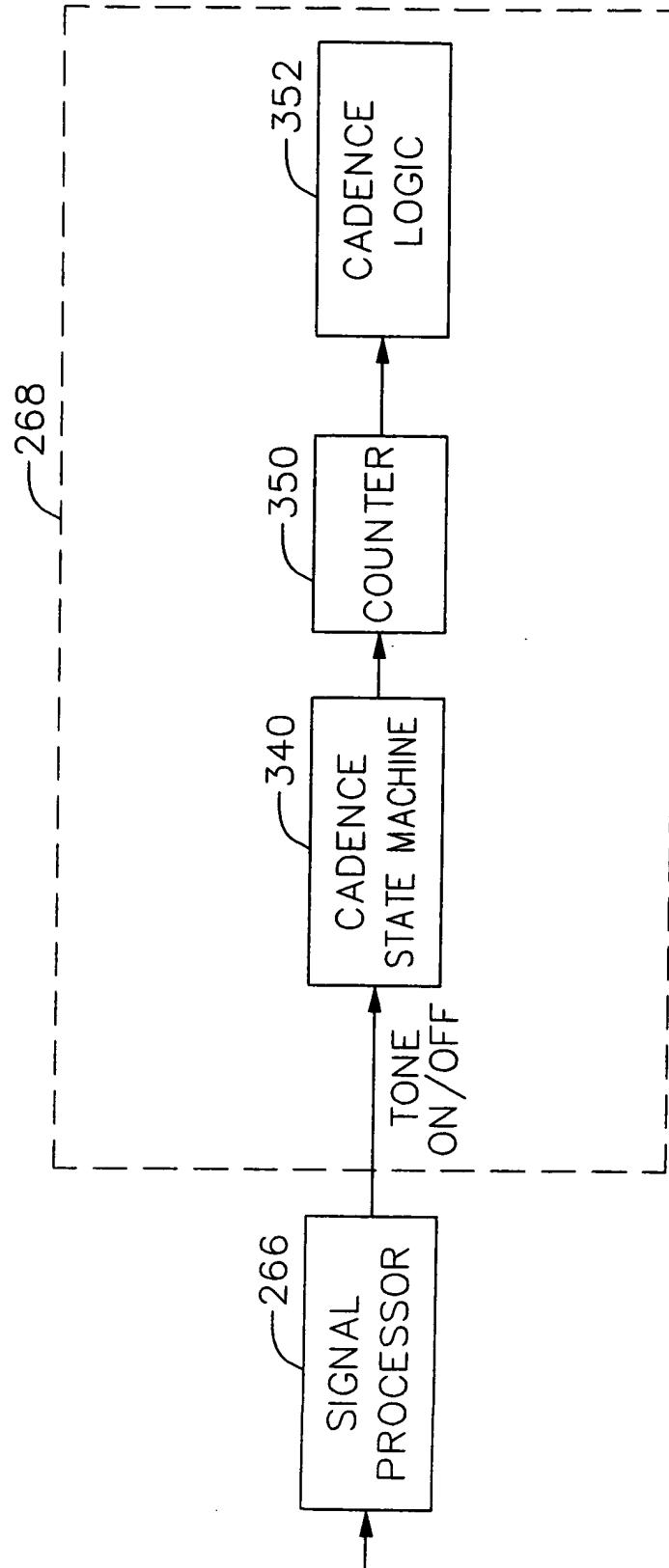


FIG. 19

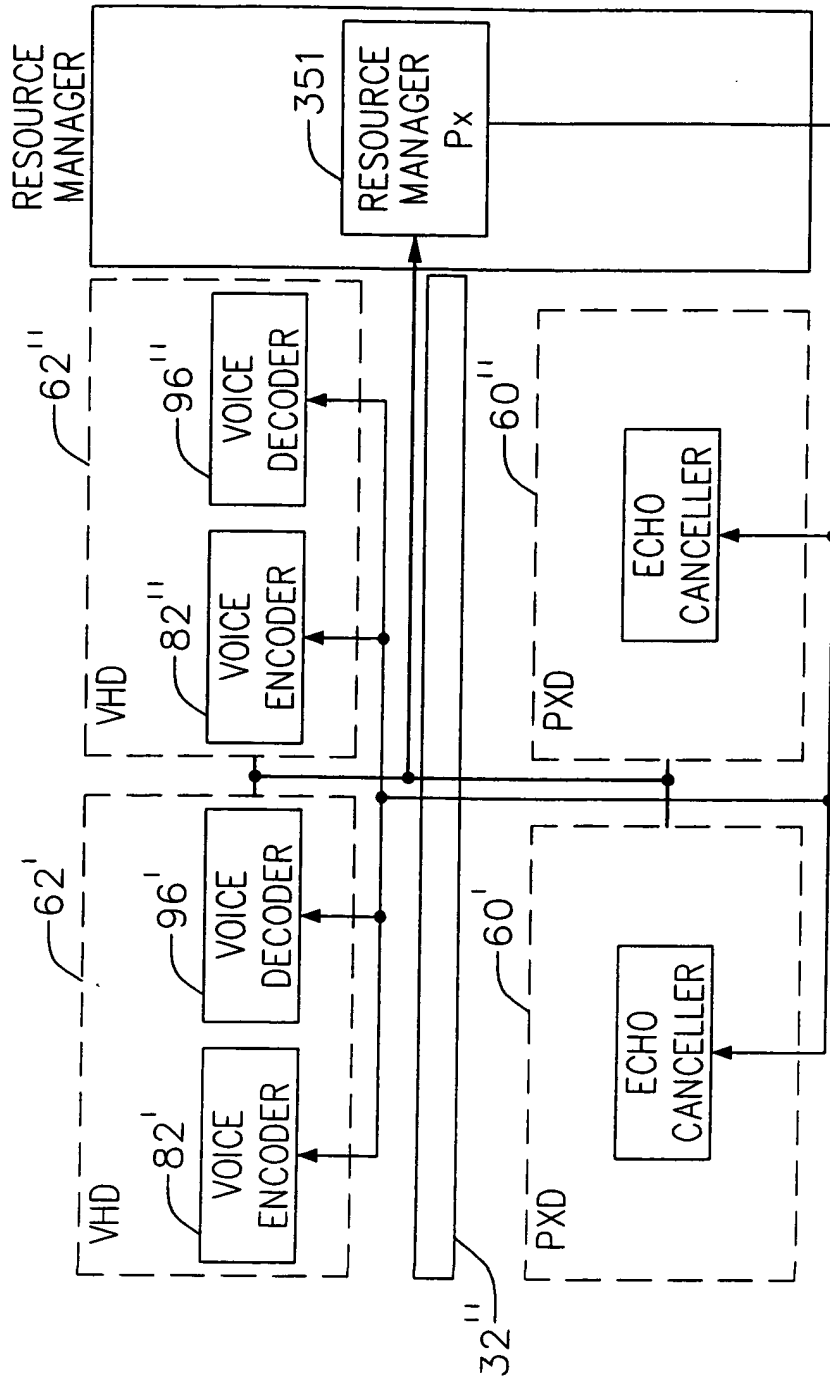


FIG. 20

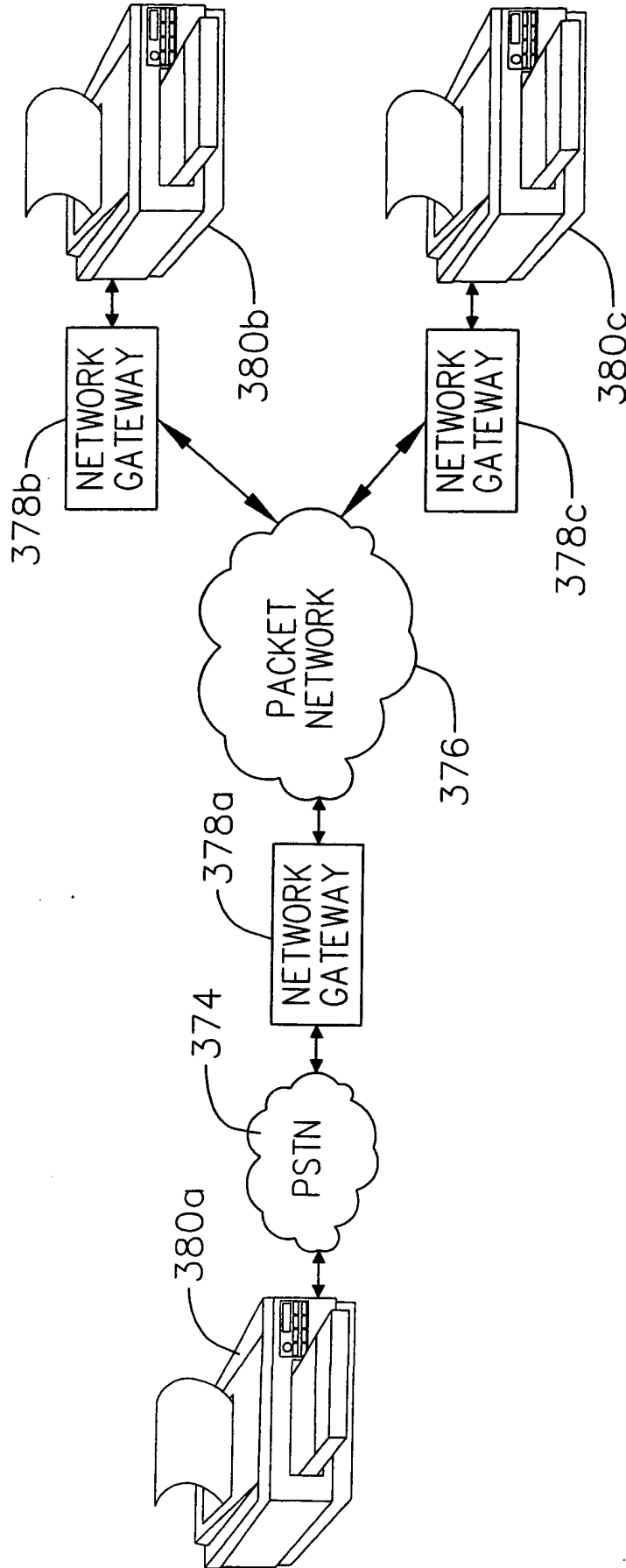
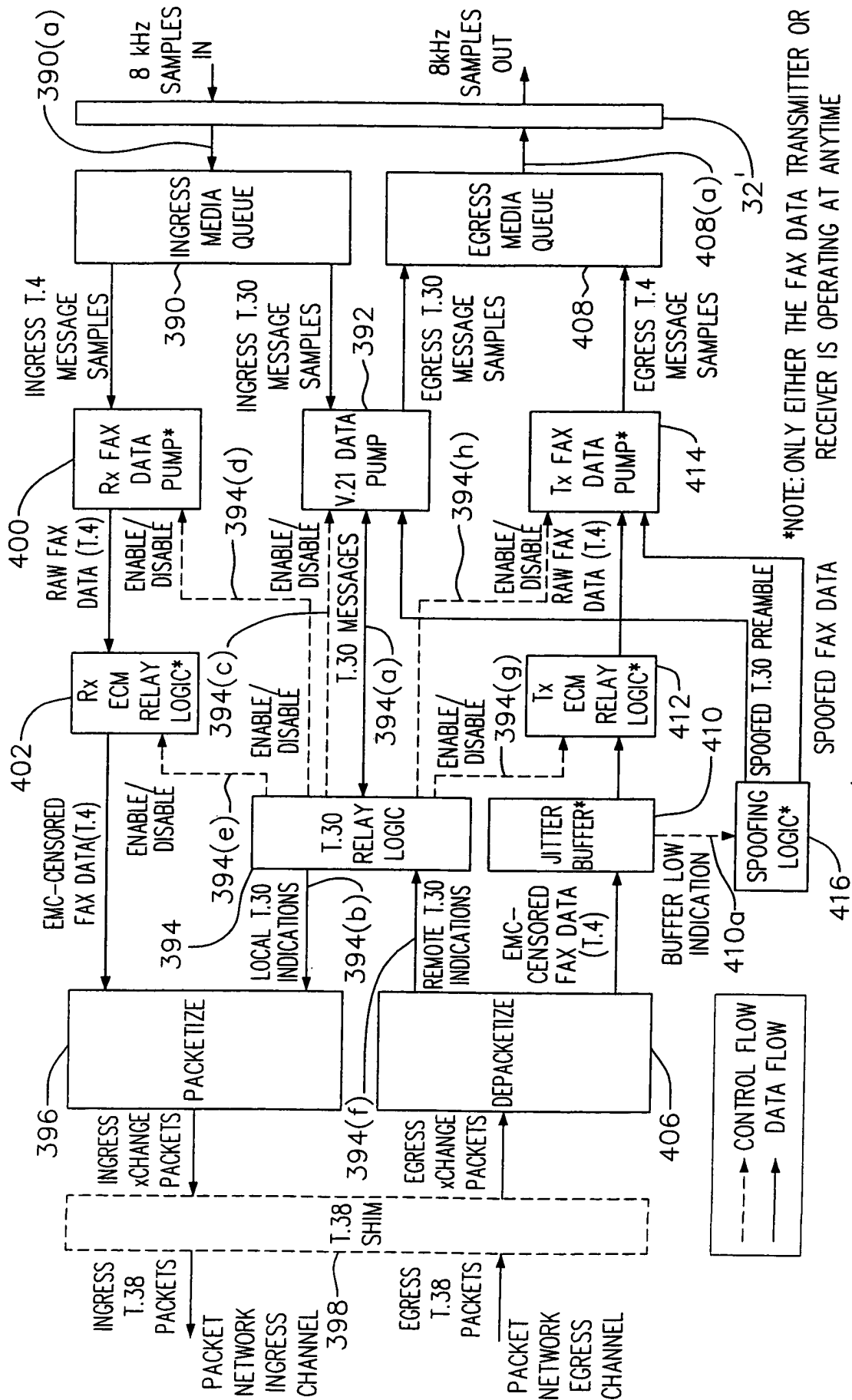
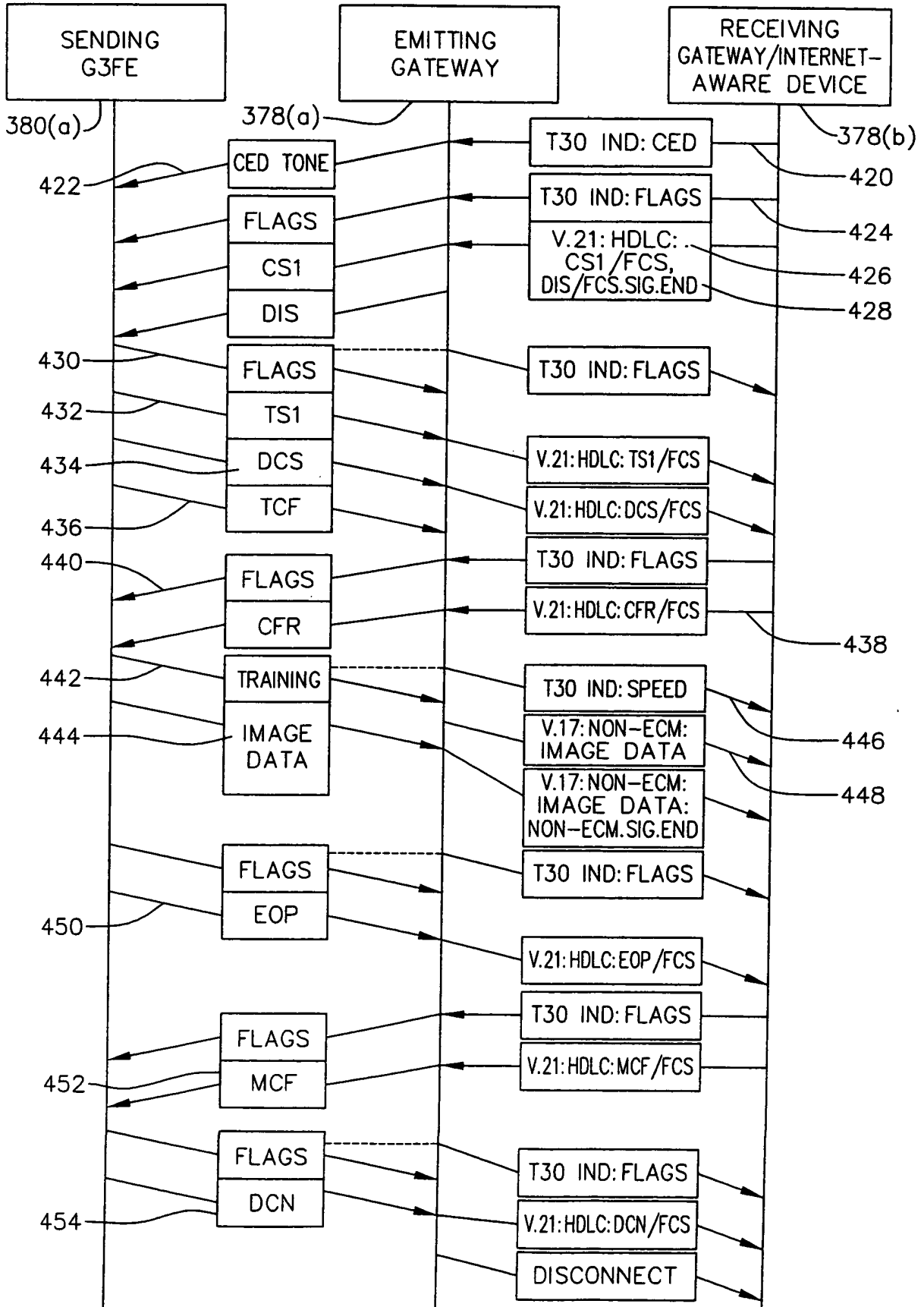


FIG. 21



**FIG.22**





**FIG. 23**

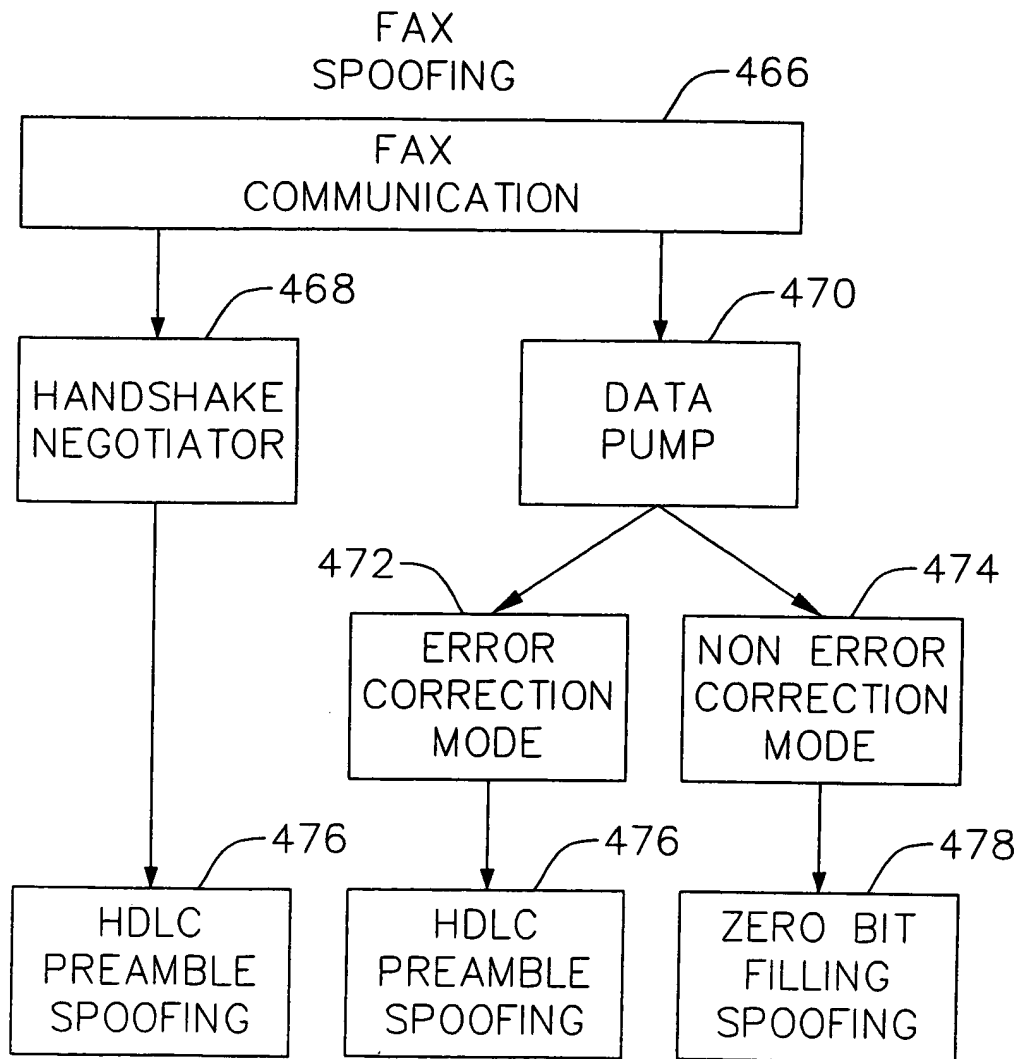
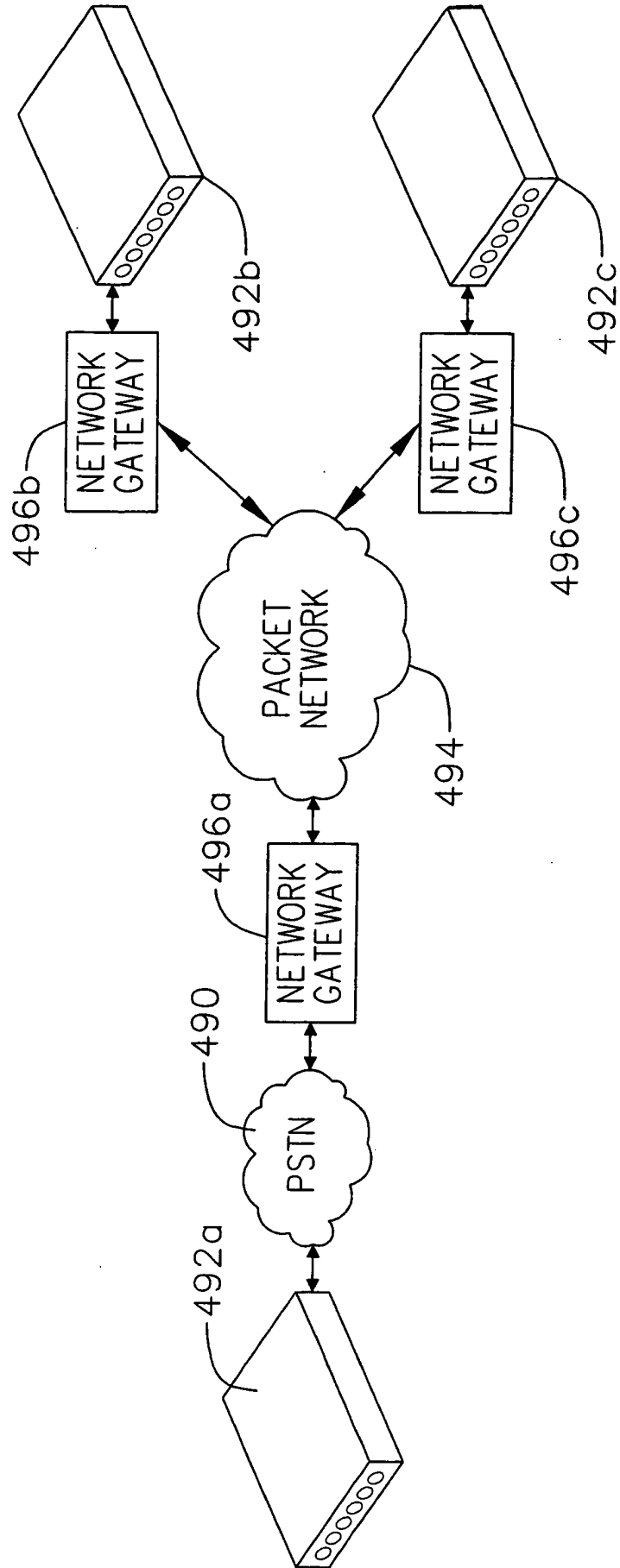


FIG. 24



**FIG. 25**

The diagram illustrates a V.42 modem system with the following components and data/control flows:

- PACKETIZE (506):** Receives **LOCAL ANS(am), AA, AC INDICATIONS** (502(e)) and **LOCAL V.14/V.42 INDICATION** (524(d)). It outputs **INGRESS DATA** (520(c)) and **LOCAL RATE CODES** (520(b)).
- DE-PACKETIZE (508):** Receives **REMOTE RATE CODES** (520(c)) and **REMOTE V.14/V.42 INDICATION** (520(b)). It outputs **REMOTE ANS(am), AA, AC INDICATIONS** (502(e)) and **EGRESS DATA** (510).
- CALL NEGOTIATOR (502):** Exchanges **LOCAL ANS(am), AA, AC INDICATIONS** (502(e)) and **EGRESS SAMPLES(ANSam, V.8 MENUS)** (502(a)) with the **DATA PUMP Rx**.
- DATA PUMP Rx (504):** Receives **INGRESS SAMPLES (DATA)** (504) and outputs **INGRESS MEDIA QUEUE** (500) and **INGRESS SAMPLES(ANSam, V.8 MENUS)** (502(a)).
- DATA PUMP STATE MACHINE (522):** Receives **LOCAL RATE CODES** (520(b)) and **LOCAL ANS, AA, AC INDICATIONS** (524(a)). It outputs **RATE CODES** (520(a)) and **NEGOTIATION MESSAGES** (V.42).
- DATA PUMP Tx (512):** Receives **EGRESS SAMPLES (DATA)** (512) and outputs **EGRESS MEDIA QUEUE** (514) and **EGRESS SAMPLES(ANSam, V.8 MENUS)** (502(d)).
- ERROR CONTROL MODE NEGOTIATION LOGIC (524):** Receives **LOCAL ANS, AA, AC INDICATIONS** (524(a)) and **LOCAL RATE CODES** (520(b)). It outputs **EGRESS SAMPLES(ANSam, V.8 MENUS)** (502(a)) and **EGRESS DATA** (510).
- RATE NEGOTIATOR (520):** Receives **LOCAL RATE CODES** (520(b)) and **REMOTE RATE CODES** (520(c)). It outputs **RATE CODES** (520(a)) and **NEGOTIATION MESSAGES** (V.42).
- JITTER BUFFER (510):** Receives **EGRESS DATA** (510) and outputs **EGRESS DATA** (510).
- END TO END CLOCK SYNCHRONIZATION LOGIC (518):** Receives **EGRESS DATA** (510) and outputs **EGRESS DATA** (510).
- SPOOFING LOGIC (516):** Receives **EGRESS DATA** (510) and outputs **EGRESS DATA** (510).
- Legend:** Dashed arrows represent **CONTROL FLOW**, and solid arrows represent **DATA FLOW**.

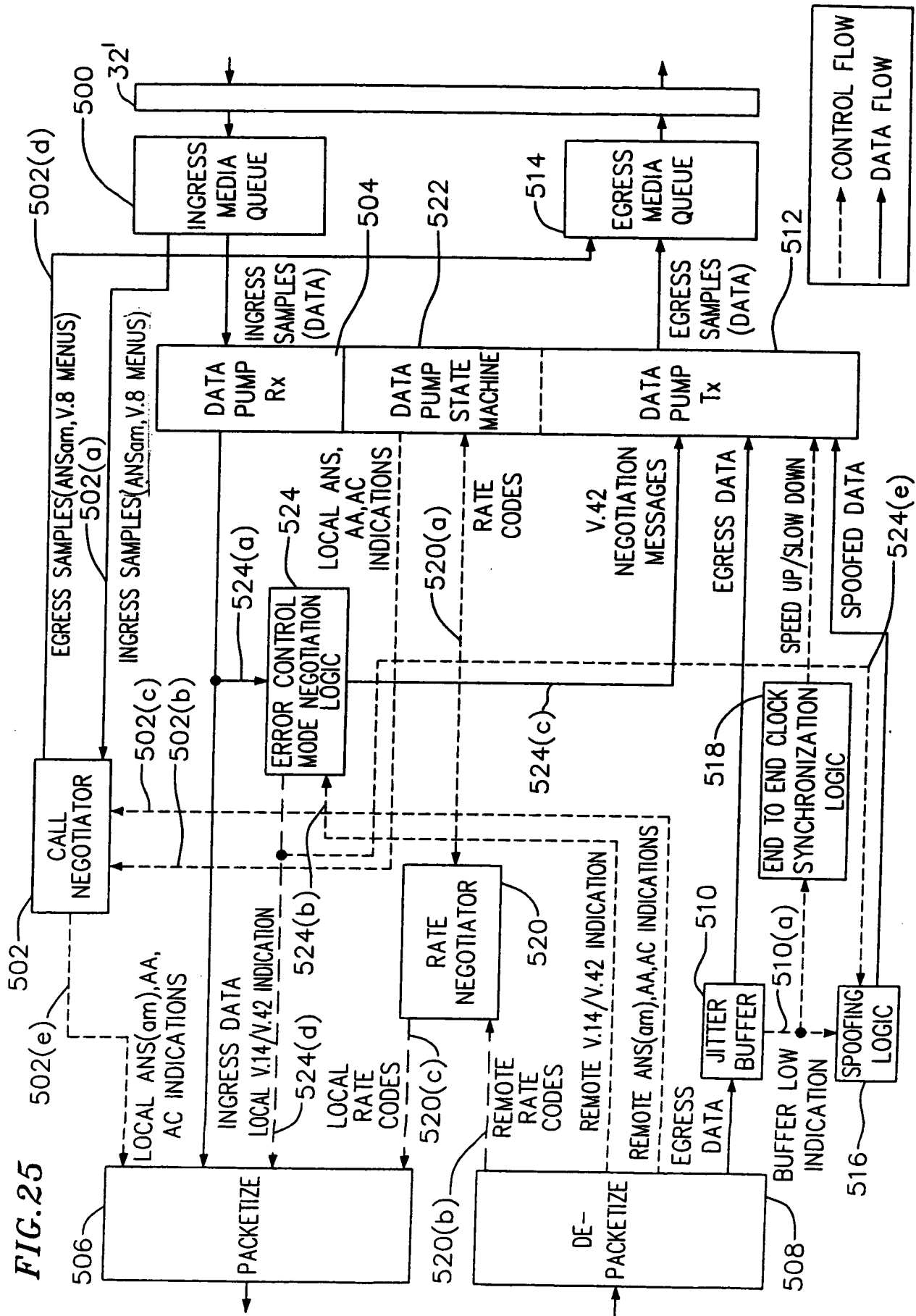


FIG. 26

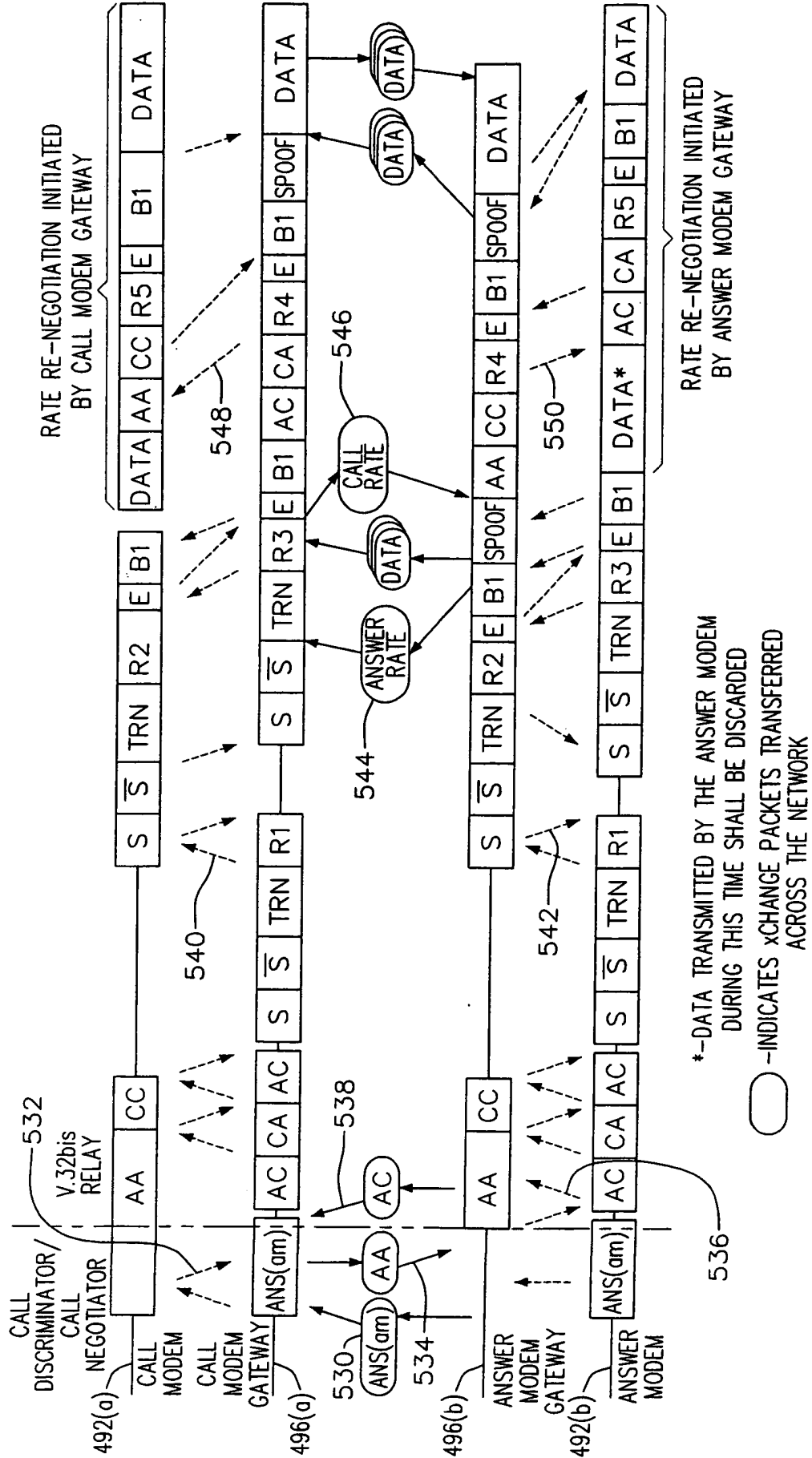


FIG. 27

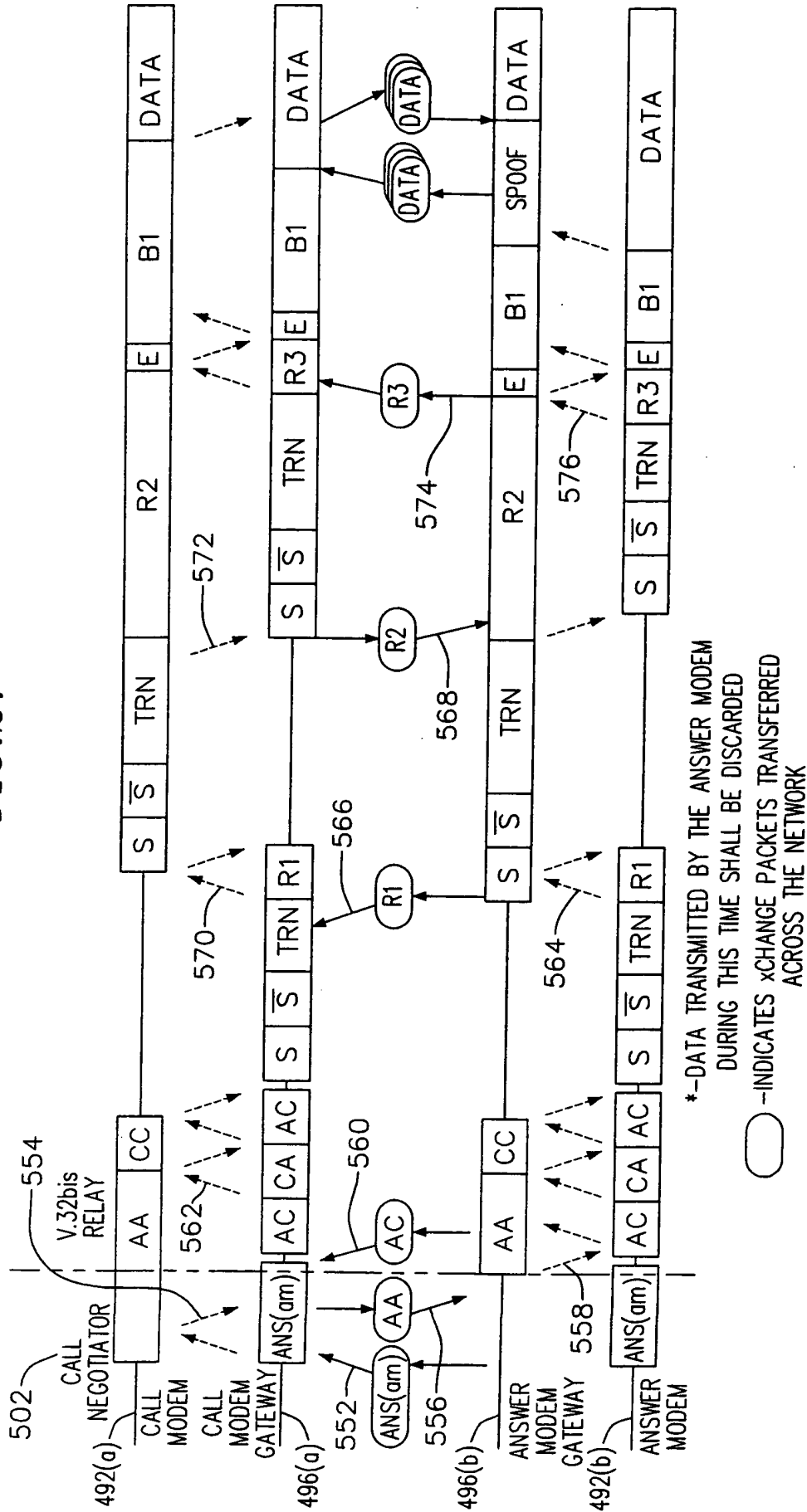


FIG. 28

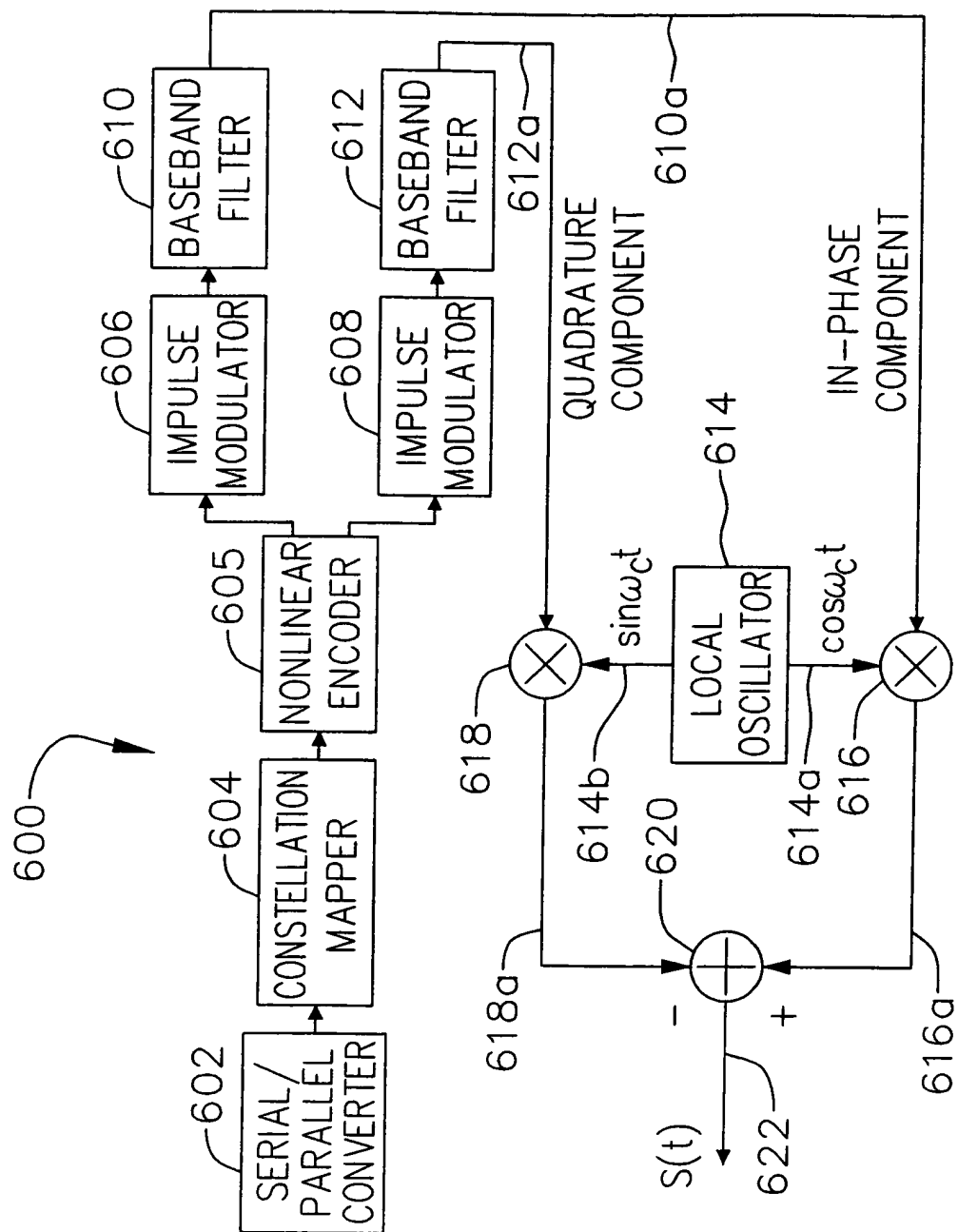


FIG. 29

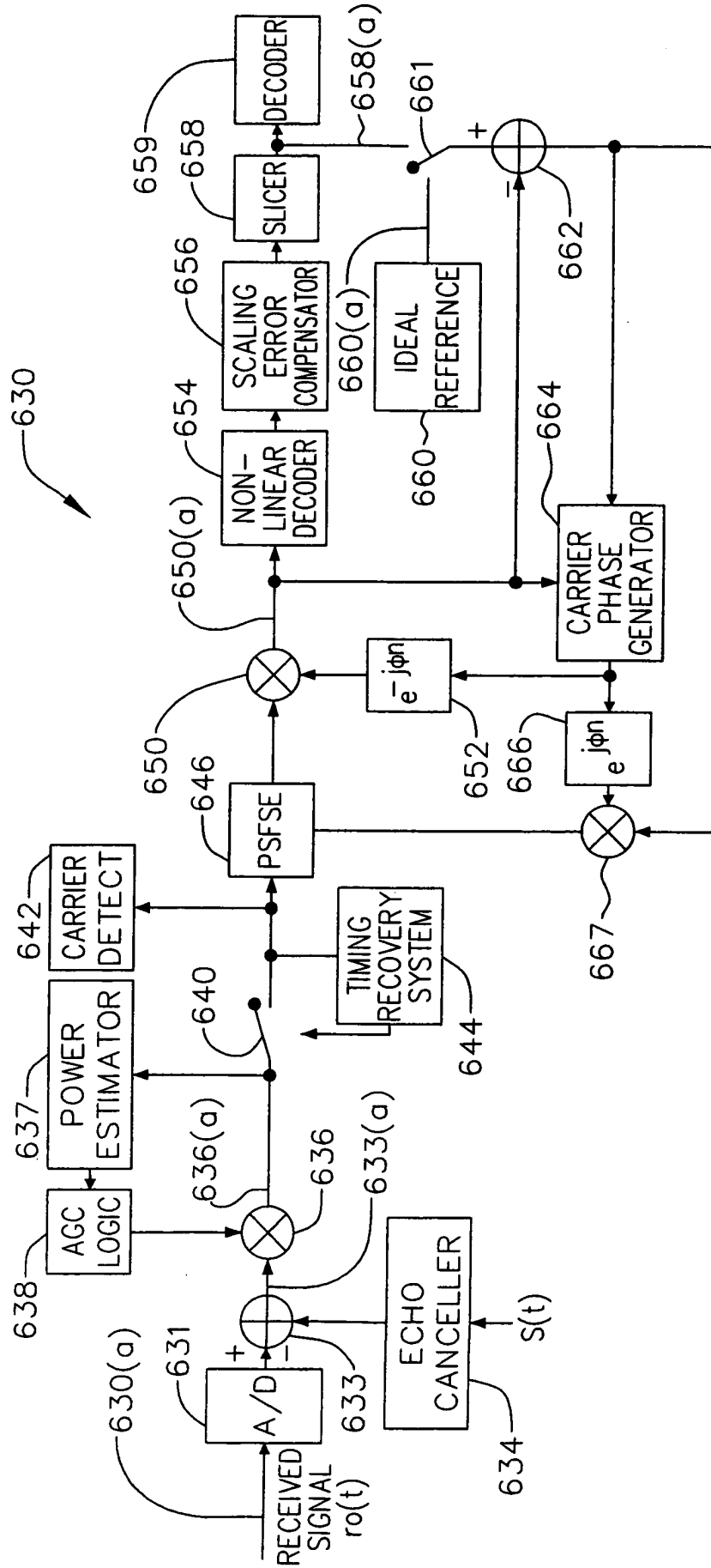


FIG. 30

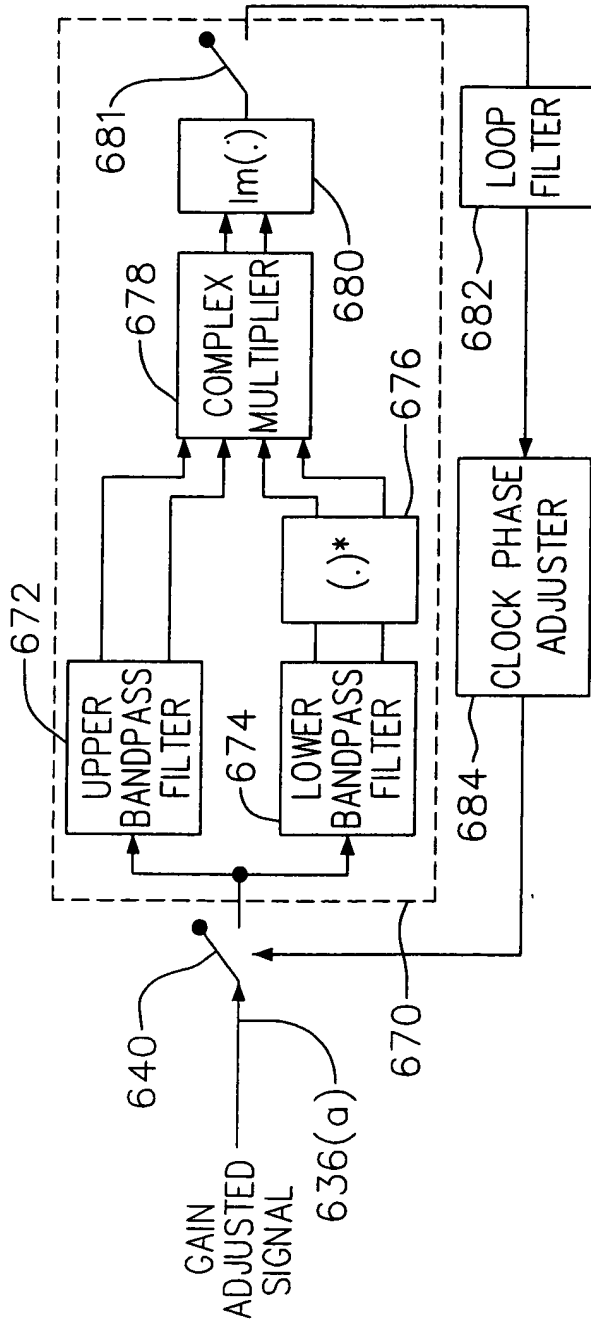
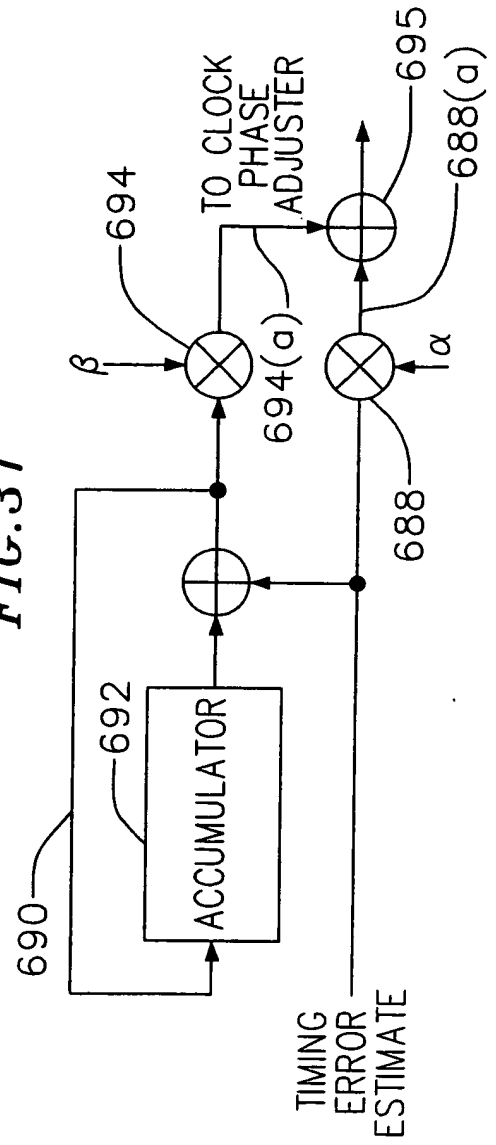


FIG. 31





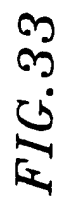
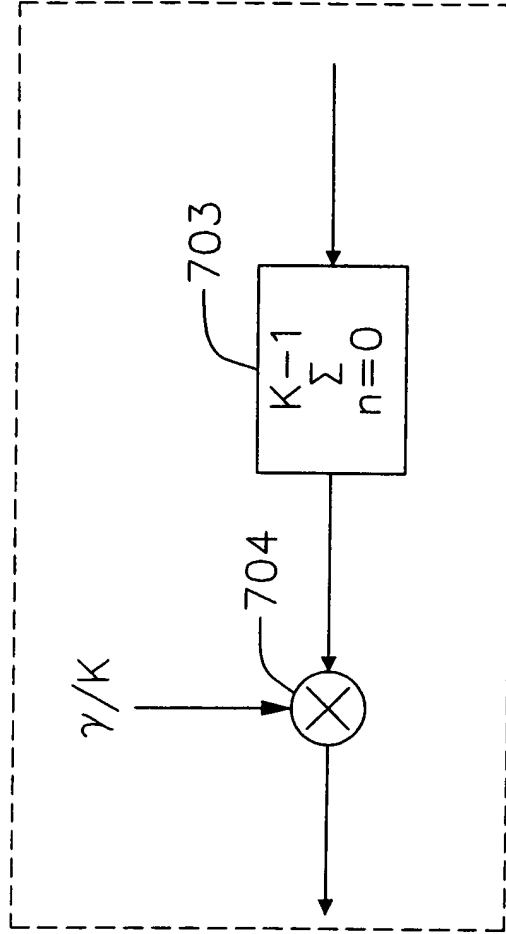


FIG. 34

700



TIMING FREQUENCY  
OFFSET ESTIMATE

